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ABSTRACT

An evaluation of the Astor Program for Gifted Children, introduced in 1973, in the New York City public schools is presented. This study is a follow-up of the "pioneer" pupils (those accepted during 1974-76). Sources of data included: a student questionnaire; student attitude scales; a parent questionnaire; a principal questionnaire; a teacher questionnaire; test results from standardized achievement tests in reading and mathematics; personal interviews with program personnel; classroom observations; interviews with pupils; and miscellaneous information from the director. Following introductory and background information, data obtained from principals, teachers, parents and students (both current achievement and reactions to their early experience) are presented, followed by a discussion of factors (such as timelines, parent involvement, and specific program goals) influencing the success of the Astor program. The questionnaires and rating scales utilized in the study are appended. (KM)

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THE ASTOR PROGRAM FOR YOUNG GIFTED CHILDREN: TEN YEARS LATER

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SECTION I

THE ASTOR PROGRAM: SOME PRELIMINARY COMMENTS

It is an unfortunate aspect of educational innovations that most have short lives, including many that have achieved their goals and have proven worthy of a continued existence. Usually, the duration of innovative programs is defined by the period of extra funding. Therefore, when a program survives the transition from private to public funding, the trials of budget cutbacks, changes in administration, supervision, personnel, and the mere passage of time and dimming of memories, one may justly ask: "What are the factors that have led to its survival as a concept and as an active educational model?"

PURPOSE

The Astor Program for Gifted Children was introduced as an innovation in the public schools of New York City in 1973-74 under private funding. Ten years later in 1983-84, it remains a thriving program which has had an impact on educational planning and curriculum not only within the confines of the communities where it was introduced, but also throughout New York City, the United States, and even in foreign countries. It is relevant then to try to determine what the factors are that have led to the survival and expansion of this educational innovation and to inquire about the impact of its philosophy and practices on the students, schools, and teachers, as well as on the educational community in general.

SOME BACKGROUND INFORMATION AND CURRENT STATUS

The Astor Program was developed against an historical background that viewed early identification and, therefore, education of the young gifted child as impractical as well as unnecessary. Actually, attention to giftedness has proceeded in reverse chronology, beginning with their recognition at the university level and proceeding backwards to the ages corresponding to grades four, five and six, or about nine to twelve years of age. The literature is rich with programs and discussions directed to the upper elementary age group. But, as of 1973-74, it was almost barren for the earlier years.

In the fall of 1973, when the Astor Program was introduced, it had two major goals. One was to re-focus the attention of the City's school system on the needs of its large gifted and talented population, identified mostly in grades four through twelve and estimated to be about 16 percent of its total pupil enrollment or about 178,000 students (1). The other goal, for which the Astor Program has become better known, was designed to meet the needs of intellectually gifted children, beginning at age four and covering the primary years, prekindergarten through grade three.

Achievement of the first goal has been discussed in earlier reports and at several national and international conferences (2,3,7). However, although the focus of this study is on the second goal, a brief update on the first aspect may be in order at this point. Besides the specific influence of the Astor Program teaching model, which will be discussed later, it is noteworthy that the city now has a budget line for the gifted. There is a

coordinator of gifted programs in every one of its thirty-two city school districts, as well as an acting director located at Central Headquarters. Magnet schools for the gifted have opened in various parts of the city and there is a movement under way to re-create the three-year high school for the gifted, formerly known as Townsend Harris. The city has sponsored several teacher training institutes. There is a growing stress on early childhood education generally and attention is being given to the gifted in this population. Where once, in the late sixties and early seventies, the subject of gifted education was viewed with suspicion and animosity, in the present climate it is a popular and rapidly growing activity. What had seemed to be a frustrating and hopeless task has proven to be a most satisfying development in the city's educational programming. The role of the Astor Program in bringing this about is openly recognized and acknowledged. It will also become apparent as we discuss the impact of the second goal of the program on the school system.

The major funding for the early childhood classes, covering the primary grades prekindergarten through three, was for a period of three and one-half years through June, 1977. The fall of 1973 was devoted to planning, pupil selection, and curriculum design. The first two classes were formed in February, 1974, one in each of two city boroughs to serve as a central school for the entire borough. They were homogeneously grouped, full time classes, meeting from nine to two daily.

The funded program was supervised centrally, with all teachers and staff responsible directly to the director (the author). Many were paid out

of funding grants, even though they were all fully licensed New York City teachers. Except for providing the basic supplies, furniture, and equipment required in all classrooms and being responsible for pupil safety and welfare, local schools had no other obligation. Central supervision was exercised by frequent classroom observations, meetings and training sessions with teachers, and by maintaining a telephone line directly to each classroom.

In June, 1977, when the private funding ended, there were 16 prekindergarten-primary classes in six city school districts, serving 409 pupils. One year later, there were 28 classes in these districts, serving 667 pupils. By 1982, the influence of the Astor Program had permeated the upper grades as well, when there were over 2500 pupils in 109 classes in schools of the six city school districts originally involved, all committed to Astor Program philosophy and practices. Additionally, there were 144 classes modeled after the Astor Program at the prekindergarten-primary grade levels in schools of 24 of the city's 32 school districts.

IMPACT OF THE ASTOR PROGRAM OUTSIDE THE NEW YORK CITY SCHOOL SYSTEM

Success of the program has extended beyond New York City. The director has conducted many training sessions in communities wishing to implement the program. For example, the NOVA Program in St. Paul, Minnesota was funded by the St. Paul Foundation to replicate the Astor Program. It is still in operation, under public funding now, and making plans for the advancement of their students to the junior high school. The Horseheads-Elmira school district of New York State uses a video-tape of training sessions conducted there to continue its work on the early education of the gifted. Among other

localities in the United States where training sessions have been held for implementation of the Astor Program model of teaching the young gifted child are: Matteson (Chicago suburb), Illinois; Halston, Ontario; Wicomico, Maryland; Lynnfield, Massachusetts; Boston, Massachusetts; Burlington, Ontario; Oceanside, New York; East Williston, Long Island; Cambridge, Massachusetts; Cowansville, Quebec; Saginaw, Michigan; Columbia, South Carolina; and many others. As the pioneer early childhood program for the gifted in a public school system, it has also served as a model for public school classes in Louisiana.

Curriculum materials prepared by the Astor Program are in continuous demand. To date, requests have come from 45 states, Canada, Venezuela, Belgium, France, Israel, Bulgaria, South Africa, New Zealand, Australia, Greenland, and Germany.

Teachers College, Columbia University now offers a course in Education of the Young Gifted Child (Course Catalog # TE 4084) which is based on the Astor Program and was introduced by the director. The Edward John Noble Foundation funded student stipends for this course for three years.

PROCEDURES

The follow-up of the Astor Program's "pioneer" pupils, those accepted during the school years 1974-75 and 1975-76, was intended as a longitudinal study to answer the frequently asked question: "What has happened to the children since they participated in the early phases of the program?"

Sources of Data

Insofar as was reasonable, objective data were collected which could be compared to information gathered earlier in the program (2,3). These

included measures of achievement in reading and mathematics, attitudes toward various aspects of school, personal observations and reactions of pupils, parents, teachers, and administrators. The following instruments and sources of data were used:

- Student Questionnaire
- Student Attitude Scales in Ten Aspects of School
- Parent Questionnaire
- Principal Questionnaire
- Teacher Questionnaire
- Test Results from Standardized Achievement Tests in Reading and Mathematics
- Personal Interviews with Personnel Involved in the Program
- Classroom Observations
- Taped Interviews with Pupils
- Miscellaneous Notes Gathered through News Items and Other Events Known to the Director

Reaching the Students: Problems Encountered

Students were reached by various means. For those who were still in participating schools, there was no problem. Class lists were available from the schools. Letters requesting permission to test and interview students and granting access to all records were sent to all parents. This was readily granted. Testing and interviews for these children were conducted in their schools.

Students who had left a participating school presented one of the most difficult aspects of the study. Some had transferred to other schools

within the school system. Some had moved to other states and one had gone to Greece. School records rarely gave the new address of the student. In many cases, our information proved incomplete, and the mail was returned as undeliverable. In other instances, repeated mailings produced no response.

Of the 324 families we tried to reach, 191 were parents of children who had been admitted to the program in Level I classes (the prekindergarten/ kindergarten year) from February, 1974 through February, 1976. The post office returned 31 of the packets to these families because of address changes, leaving 160 students still available. Further attrition in numbers occurred because 58 children did not complete the cycles of time established for this study. These were students who had been admitted to the Level I classes but who, for a variety of reasons, had left the program before June, 1977. They had been included in the general canvass of students in the hope of learning how they had fared in their new locations. Schools in many parts of the country were most cooperative in forwarding our mail to these families, but unfortunately only nine responded.

As a result of these losses in population, there remained 102 students who had completed the two time cycles established for intensive study. The first covered the period from February, 1974 through June, 1977 when the private funding for classes ended. The second covered the period from February, 1974 through completion of grade 6 during 1980-82, for those students who had been part of an Astor Program sequence throughout the entire period. These two groups yielded a response rate of 92 out of the total 102 pupils, or 90.2%.

Another category of students who became involved in the study were those who had been added to Astor Program sequences after the private funding ended, in grades 4, 5, or 6. It had been considered wise to include all students in a given class, rather than having teachers re-organize their lessons to accommodate our testing schedule. This procedure turned out to be quite satisfactory for all concerned. These students constituted the balance of the group (N=133) whose parents had to be reached for consent forms. These were readily granted.

As will be noted in later sections, numbers used in the individual analyses will vary depending on the availability of specific data.

PROSPECTUS

In the following sections, those factors which have affected the continuation and implementation of the program as viewed from the perspective of principals, teachers, and parents are reviewed first. (Sections II, III, IV.) These are followed by an analysis of the impact of the program on student achievement and reactions to their school experience. (Section V.) Lastly, a brief summary of factors contributing to the continued success and influence of the program is presented. (Section VI.)

SECTION II

THE PRINCIPALS' VIEWPOINT

Even though the Astor Program had been administered centrally, it was a goal of the program to involve all administrative staff as much as possible, including the Schools Chancellor, district superintendents, principals, and district coordinators. Their counsel and cooperation was sought and appreciated. They were involved in citywide conferences as speakers and as honored guests. They cooperated in teacher selection. They were kept informed about program plans and philosophy. Every effort was made to encourage principals, in particular, to become involved with the program and to consider it an integral part of the school. Visitors (there were and still are many) who contacted the director were advised to make their contacts directly with the principals as often as possible, especially after the period of private funding

As had been done at the end of the funding period, a questionnaire was sent to the principals of the schools that had been part of the ten schools in the six participating school districts. Nine of the ten principals returned their questionnaires. Information about the tenth school was obtained by a personal visit and interview and from the district coordinator of the gifted. The questions asked and summaries of the responses given follow:

Question 1. How many classes known as Astor Program or based on that program are there in your school?

All reported that they now had Astor Program classes from the first through their highest grade, 4, 5, or 6, depending on the school organization. All but one also had classes at the kindergarten level, and one district

also had prekindergarten classes in its three schools and was planning to add more.

Question 2. Are these classes called Astor Program? How are they identified?

One-half the districts have retained the name Astor Program; the others use terms such as Exceptionally Gifted, Gifted, or Gifted Center.

Question 3. At what age are children admitted to the prekindergarten, if any?

Only one district had continued the early admission policy by including prekindergarten children in the program. (Comment: It is likely that the early admission policy inaugurated by the Astor Program may be resumed as the city moves toward the extension of kindergarten classes to a longer day and provisions for earlier education. New York State is also giving serious consideration to this step.)

Question 4. What is the length of the school day for these classes?

Three districts have a half-day kindergarten session. All others have full-day programs at that level.

Question 5. Do you plan to continue these classes next year?

All planned to continue the classes and even to extend their programs to the upper grades. In one district, there are now 41 Astor Program classes, extending through the junior high school. Another has 18 such classes.

Question 6. How are children selected for the program?

Except for one district, which had never accepted the Stanford-Binet as a criterion measure, all continue to use procedures established by the funded program, relying on the Stanford-Binet plus other measures for pupil selection.

Question 7. Do you have any in-service training for teachers?

All but one principal arrange for participation in some form of in-service training. They use district workshops, rely on local colleges, or have monthly meetings. Many new teachers in these programs have taken the director's course on the subject at Teachers College, Columbia University.

Questions 8. What plans are being made for articulation with the junior high schools?

Special efforts are made by most districts to establish a coordinating process with the junior high schools into which the children feed. For some, the entire program philosophy has been extended through the junior high school. Others direct the student to the Special Progress classes at this level, which cover the three-year program in two years.

Question 9. What has been the impact of the program on other teachers in the school?

One principal felt that he could not determine this, but all the others reported that the program had had a favorable impact on other teachers in their schools. They commented that the program had motivated other teachers to take more trips; develop more flexible teaching methods; deal with various learning styles; develop learning centers for their classes; share ideas, materials, and aspirations. One noted that it was difficult to recruit teachers for the program because of the work involved. Another commented that, although some hostility persists, more are competing for the "privilege" of teaching the classes.

Question 10. Has there been any carryover of Astor Program practices to other classes?

Two principals had no comments on this topic. The others cited the following developments:

- Teachers share ideas, successes.
- New programs adopt the Astor Program methods.
- Children in other classes, as well as teachers, are stimualted to compete with the Astor Program classes in assemblies and in creative writing.
- There is more individualization.
- More trips are planned by other teachers.
- There is greater use of activity centers.
- There is greater participation in in-service courses.

Question 11. How does the community respond to the presence of these classes?

Although all reported favorable community responses, two had the following reservations:

- In a somewhat homogeneous ethnic community, there is a feeling that "other" children are "outsiders" and that the program discriminates against the local population.
- Nearby schools resent the loss of their gifted population, but will not introduce "elitism" into their school.
- There is a feeling (unsupported) that Blacks are not enrolled in sufficient numbers.

Finally, the principals were asked to add any further observations about the program or its impact on the school. These will be summarized in two categories: 1) problems, and 2) positive aspects.

Among the problems faced by individual principals, there were the following:

- Hostility of other teachers to the program
- Unwillingness of other teachers to teach the class because of the work involved
- Community resistance to "elitist" classes

- Class dichotomies created by small school population, where there are only two or three classes on a grade

- Unrealistic parent demands and pressures to have their children included in the program, which "strains administrative time"

- Parents' expectations that bus transportation handled by the Board of Education will run as efficiently as a private arrangement made by individual parents

- Insufficient funding allocations

On the other hand, principals seem to be proud of the classes and plan to continue and expand the program in spite of the occasional problems. Certainly, the spread of the program throughout the city's schools is evidence that principals feel they can cope with the problems and that the educational gains outweigh the difficulties they must face. Among these gains, principals cite the following:

- The Astor Program classes help to maintain high levels of scholastic excellence.

- Teachers in the program are highly motivated, and they spend much time planning their work.

- Other teachers are motivated to do more.

- The communities want the classes. (Note exception cited under problems, above.)

- There is a high level of parental involvement.

- The school's reputation throughout the city is enhanced and there are many visitors from other communities.

As one principal phrased it: "The varied aims I had when we first accepted the Astor Program have been achieved. They include: to recognize a vital part of our population whose special needs were not being met; to provide a differentiated program for the highest achievers; to integrate the school; to retain children in the public school system."

It is apparent that part of the success of the program has been due to the pioneer principals' satisfaction with the results and the fact that they share these positive reactions with their colleagues.

IMPACT ON TEACHERS

In introducing innovative practices in educational systems, we tend to concentrate on the impact of such programs on the students. Although we may invite teacher reactions to elements in the structure and implementation of the program, we rarely ask: "What was the impact of such participation on the professional life of the teachers involved?" "To what extent do they live up to the criteria for selection established for the program?" "How much do they identify with the program?" Still another aspect of a follow-up of such teachers is learning their reactions to the transition from private or grant funding to public or institutional funding.

A preliminary review of the after-effects of participation led to the conclusion that part of the success of the program was due to the role the teachers had played in the implementation of the program and in maintaining the goals and standards developed during the period of private funding in the transition to public support.

BACKGROUND INFORMATION

Teachers in the Astor Program had been involved with its development at many levels. Not only were they responsible for their primary role, implementation of the program, but also they participated actively in the development of the curriculum. Even before the first classes started, teachers met for two full weeks to discuss and outline a plan for a truly differentiated curriculum to be used with the children, whose ages ranged from four to five and one-half. There emerged from those meetings a four-faceted curriculum which was focused on a perspective of the world from

the child's point of view. It was designed to answer these four questions: "Who am I?" "What am I?" "Where am I?" and "Why am I?" This approach made possible adventures in learning that led into innumerable fields of study, exposure to a wide range of information, involvement with both affective and cognitive experiences, as well as opportunities for physical development.

Teachers participated in monthly meetings where they exchanged ideas and attended lectures provided by the director that covered a broad range of relevant subject matter in the field of the gifted. At these sessions, the teachers discussed the curriculum and continually introduced changes and improvements.

Further involvement with the program was provided by the citywide conferences sponsored by the program and at which teachers displayed their pupils' work and had an opportunity to share their ideas with teachers, administrators, and parents from all over the city. Every opportunity was provided for giving recognition to their important role in the progress of the work.

Their involvement was so well grounded that they became something of a family. When, at their request, a social meeting was planned long after the private funding had ceased and each had gone back to the routines of the public school system, most of them returned to enjoy a luncheon which reflected their affection for each other, their desire to maintain ties with what had been, apparently, a very important part of their professional lives. Two, who had previous engagements, took the time to stop in at the luncheon just to say hello to old friends. During the luncheon, one remarked: "Listen to them! They are right back in the old form, exchanging ideas on how they

meet and handle classroom problems!" And, indeed, that was what was happening within each little enclave around the table of twenty-eight star performers and members of the office staff.

PROCEDURES

As had been done at the end of the three and one-half years of private funding, a questionnaire was sent to each of the teachers who had been associated with that period. (Others were now involved in the program, but were not part of the original team.) Altogether, there were 28 teachers involved in the first phase of the program. Of these, 23 were regular classroom teachers and 5 were specialists in French, music, or art. Responses to the questionnaires were returned by 3 of the specialists and 20 of the regular classroom teachers. Two of the specialists could not be reached by mail or otherwise. One of the regular teachers unfortunately had become seriously ill and could not respond. Two teachers did not respond, although we had been able to follow their progress in the school system as well.

PRESENT ASSIGNMENT

In fact, the first questions that arise with respect to the teachers who were part of that initial phase of the study are: "Where are they now?" "What are they doing?" Therefore, the first question on the questionnaire was related to their present assignment or position.

The Specialist Teachers

The three specialists who responded returned to former or new assignments in their speciality. Their use as specialists had been a luxury affordable only because of the private funding. Some schools have made adaptations

in this area by releasing a teacher who is trained in a special area to teach the subject for a few hours per week, while the regular classroom teacher takes over the other class. This is a practical alternative to the Astor Program practice of coordinated specialist teaching, which had been demonstrated to be very effective (5).

The Regular Classroom Teachers

As of the Spring of 1983, 17 of the 23 pioneer classroom teachers were still working with the the gifted in some manner. Thirteen were still teaching Astor Program classes in their respective schools. Two had become district-wide coordinators of the gifted. One acquired a doctorate in mathematics and opened a school for the gifted. Another was pursuing a doctoral program in education of the gifted.

Of the remaining 6 teachers, one received a fellowship from a major university and moved into a management position with a large corporation; one opened up a chain of guest houses with remarkable success. One teacher retired for age and one had to stop working because of illness. The last 2 were victims of excessing of teachers in certain districts and were transferred to other schools.

REACTIONS TO SPECIFIC CHARACTERISTICS OF THE ASTOR PROGRAM

During and at the end of the period of private funding, we frequently discussed aspects of the program organization, procedures, curriculum, etc., with the teachers. These reactions were reported in a previous publication (3). It was possible that, under public funding and local control, teachers would find that the Astor Program practices and philosophies might need modification.

We, therefore, asked them to react to various aspects of the program. We asked whether each aspect should be continued in the same manner or changed. Following is a discussion of these reactions.

Generally speaking, teachers felt that the program should be continued in the manner in which it had been conducted during the period of private funding. As one teacher phrased it: "The program was an ideal one."

Teacher-Pupil Ratios

The program employed two regular teachers at the prekindergarten/ kindergarten level, with a teacher-pupil ratio of 1 to 10 or 12; and at the kindergarten-grade 1 level, of no more than 1 to 15. Additionally, when funds were available, a paraprofessional joined the class. Otherwise, a parent assisted with routine chores or, again when available, a student teacher assisted.

Specialist Teachers

Specialist teachers were employed to teach music, art, and foreign language in a coordinated teaching situation, with the regular classroom teacher(s) present during the lesson so that the work could be coordinated with the class curriculum. The success of this approach had been demonstrated in a previous study with gifted children in grades 4-5-6(5).

Parent Assistance

Parent roles in the classroom were restricted to relief for routine chores, accompanying the class on trips, special exhibits or fairs, or sharing of special skills or information on careers.

The Curriculum

A two-track curriculum, based on a pupil's perspective, focused on mastery of basic and thinking skills and on the study of special interest topics that provided opportunities for work in major curriculum areas. There was stress on affective education and character development. Children learned to read by a modified procedure that encouraged a rapid advancement of the skill. An atmosphere of controlled discipline permitted pupil-pupil conversation, amplified by frequent classroom discussions.

Resources

Classrooms had available libraries of carefully selected books on a wide range of ability levels, including fiction and non-fiction, reference books, encyclopedias, maps and globes, games, teaching aids of various kinds, tape recorders, phonographs, and other materials.

Trips

Frequent trips out of the classrooms were encouraged, as were invitations to guest speakers.

To all of the above characteristics of the program there remains an almost unanimous support by teachers, especially those continuing with Astor Program classes in their present assignments.

Length of the School Day

Those who taught the younger children in PreK-K-1 prefer the four-hour day for them and find the five-hour day too tiring for the children.

Early Admission

There are mixed feelings about the early admissions policy, where children of four years are accepted in a class with others whose ages range up to five years seven months. In New York City, the usual range of ages in kindergarten is from four years eight months to five years seven months. In the Astor Program, those who were from four years to four years seven months were considered prekindergartners, but placed with the regular kindergarten group in what was called Level I. Early admission made it possible for these children to accelerate through kindergarten and advance to grade 1 at the end of their first school year. For the children, this practice was 99 per cent successful, but apparently the teachers found it difficult to handle.

At the upper levels, teachers felt that, if only one teacher was available, the classes should not be larger than 25 pupils. Unfortunately, in practice, beginning in grade 3 and up some class sizes were as high as 35 and, in one school, had 43 pupils with only one teacher.

Supplies

A few teachers mentioned the fact that they needed more supplies. These had been provided under private funding, but were no longer available through the regular school channels. It is a problem faced by many teachers of the gifted that authorities do not recognize the importance of providing the extra supplies that are needed by such classes. Gifted children consume paper, materials, workbooks, all at a rapid rate, since they cover so much more of the curriculum. They also need a broader range of books, readers on several grade levels, reference materials. These had been provided under private

funding and left with the classes. However, with the expansion of the program and the passage of time, the quantity had become drastically reduced or was actually non-existent.

As always, teacher comments were welcomed on the questionnaire. These are some of their own statements concerning different aspects of the program.

1. The Program As a Whole.

   Don't let it get absorbed into the regular school curriculum.

   It was a wonderful period in my teaching career.

2. Number of Regular Teachers in the Classroom

   Two teachers in the classroom provided a great deal of enrichment.

   Careful matching of teachers is essential.

3. Added Use of Specialist Teachers

   These served as an excellent source of enrichment.

   We should introduce computer, mathematics and science specialists.

4. Aid of Paraprofessionals

   They should be used only if very qualified.

5. Aid of Student Teachers

   Preferably, use those who are in a degree program for gifted education.

   It is a good learning experience for them.

6. Aid of Parents with Special Skills

   Use them for career development education.

7. Aid of Parents in Routine Tasks

   This is not necessary if there are two teachers in the classroom.

   This can create a problem if not used appropriately. Some parents resent pressure. It was not good for some of the children when other parents were there too often.

   A class is a child's learning center, not a place overwhelmed by adults.

8. Teacher Training Sessions in Central Location

I must say the wonderful experience of sharing our experiences at the training sessions was a joy. Getting together and getting to know all the teachers in the program was especially good.

9. Citywide Conferences for Sharing with the Public

The public, and parents in particular, absolutely need the education.

10. Relations with a Centrally Located Supervisor

Central control was an important element in the successful implementation of the program.

PROBLEMS ENCOUNTERED

We wondered whether teachers would recall particular problems and what solutions their later experiences would suggest to them. The responses indicate that some problems associated with gifted programs persist mostly because they reflect traits of human nature, reactions that are to be expected in a population of varied backgrounds, abilities, interests, prejudices, broad information gaps, and that probably will continue to arise--people being people. Nevertheless, the teachers reported few problems on the whole.

Some specific comments made by the teachers follow:

- Parents of other children were jealous of the program. Other teachers were, and still are, not at ease with the program.
- Other teachers (and administrators) resented the need for more than one teacher in a classroom. They also thought that teaching the gifted was "easy."
- The only major problem I confronted was the unwillingness of those following an established procedure to consider the values of an alternative philosophy.
- In a district where we did not follow the conventional Astor Program identification procedures, we would have to drop children out of the program after a few years. Parents demanded more than some children could produce.

CONTINUING OWN EDUCATION

Among the criteria we established for selecting Astor Program teachers were the following (2):*

- Intellectual superiority
- A broad range of interests and skills
- Educational background reflecting a variety of interests and at least one field of specialization other than education
- Graduate course work in education of the gifted and/or a readiness to initiate such education.

All the teachers received regular in-service training during the period of private funding, from three to three and one-half years, five hours per month for nine months of the school year, plus two full weeks prior to the start of the program, and three days at the beginning of each school year. Topics covered included: (2, Chapter 4)

- Psychology and education of the gifted
- Child development
- Theoretical backgrounds of identification
- Classroom management
- Administrative considerations
- Parent involvement
- Gneral awareness
- Teacher exchange

In spite of all this training, all the teachers who remained with Astor Program classes continued their studies on the gifted or in allied fields after the period of private funding. They attended training institutes, special conferences, lectures and meetings at their own expense and on their

*Only a partial listing is given here. Other criteria were used. See op. cit.

own time in many instances. They continued to enrich their backgrounds by studying such allied courses as art, sculpture and pottery at the Metropolitan Museum of Art, opera at the Metropolitan Opera, drama and the dance at Lincoln Center, and so on.

The essence of this spirit of intellectual growth is reflected in my experience at a recent conference of AGATE, a statewide advocacy group for gifted education in New York State of which I was president. Two Astor Program teachers were in attendance. One was giving a presentation. The other was on a sabbatical leave. Surprised at her attendance, I asked: "Why are you here?" She replied: "Oh, just to keep up with what is going on!" Two weeks later, at a conference of the National Association of Gifted Children, I was again surprised to see two other Astor Program teachers who gave up a school holiday and their own time to attend the conference, for similar reasons - to learn what was new in the field.

AWARDS, WRITINGS, RECOGNITION

Since their early participation in the program, these teachers have received a variety of awards, citations, or other forms of recognition. Two were promoted to positions as district-wide coordinators of the gifted. One was honored for her work with the Astor Program as Teacher of the Year by the New York City Board of Education. (There are 65,000 teachers in the city system.) One received an award as National Exemplar in Teaching of Science at the NASA Center in Texas. Two are recognized in volumes of Who's Who. Several have published poetry, articles, and curriculum units.

SHARING SKILLS AND KNOWLEDGE

It was an accepted goal and practice of the program to share our acquired skills and knowledge. During the period of private funding, twelve curriculum units were prepared in cooperation with the teachers. They reflect actual classroom practices on a variety of special interest topics and report on actual classroom activities. These continue to be in demand nationally and abroad.

Teachers also shared their experiences with others by giving workshops in their schools, districts, and at ciywide conferences on the gifted that were sponsored by the program, and by their published writings.

Were these practices continued after the transfer to public funding and local control? Yes, indeed. First, two of the teachers have become district-wide coordinators for the gifted. In this role, they share their experiences and skillswith teachers in their districts through in-service training sessions and conferences. Ten of the twelve others remaining in gifted classrooms have given workshops in their own schools and/or districts, at larger conferences, and at local colleges on Astor Program practices.

IMPACT OF THE ASTOR PROGRAM TRAINING, 1974-1978

Since these teachers had received intensive training and experience in early childhood education of gifted children, it was of interest to inquire how long-lasting the influence of the Astor Program philosophy would be. Did the teachers continue to implement the basic philosophy of the program? One teacher made a most gratifying response to this question. She said: "I will never be able to go back to the way I used to teach, regardless of the class composition."

Asked to state briefly how the Astor Program experience had affected their teaching patterns, some of the teachers said:

- I have a much more individualized program and have students do a good deal of independent study. The Astor Program has encouraged me to expose children to research techniques and areas of instruction that help these children learn beyond what we thought they were capable of.

- It has sharpened my awareness of students' special talents skills.

- It enabled me to expand techniques not usually recommended in regular kindergarten classes, i.e., problem solving, creativity stimulation; more trips; more topics.

- My experience has heightened my own excitement in learning and in teaching. As a result, I thoroughly enjoy my job and look forward to each day with anticipation.

- I still try to emphasize "thinking skills". I attempt to ask open-ended questions. I try to expose the children to the world around them through field trips and visiting speakers. I encourage them to make decisions and take some responsibility for their own learning.

- I stress critical thinking, creative thinking, logic and problem solving. I also include affective education.

- It reinforced my attitudes towards individualization. Being in an Astor Program class leaves me finally free to teach what and how I want.

- I feel that the thinking skills have helped me in planning my lessons in foreign language teaching.

- I became involved in affective education and character development. Meeting the needs of individual children became my focus. I could not perform now without discussion groups, special interest topics, questioning skills, etc.

- Always aim for the higher thinking skills. That training has never left me.

TEACHER RELATIONS WITH STUDENTS

Because of the innovative nature of the program, the students involved attracted much attention. We wondered whether they would maintain contacts with their first teachers. In another aspect of the study, we learned that the students generally remembered their early teachers with favor. (See Section V on pupil reactions, pp. 18ff.) Individually, apparently, they reciprocated their teachers' concerns with them. Teachers reported that students who left the city corresponded with them from their new locations. Those who remained in the city visited the teachers or wrote to them, keeping them apprized of their progress. As director, I have found this aspect of the program most gratifying, as parents or students write to tell me about their progress or about a special award.

The teachers had taken an active interest in their pupils, that went beyond the usual teacher-student involvement possible in a large city. Teachers had reports on the progress of individual youngsters, and were able to help us with tracking down many who had moved, but still corresponded with them.

IMPACT OF THE ASTOR PROGRAM EXPERIENCE

In order to probe further into the impact of the Astor Program experience, we asked: "If you had to cite only one aspect of the Astor Program as it existed under private funding, which would you consider the most significant in relation to your <u>personal</u> experience?"

The reactions to this question were as unique as the personalities and individualities of the teachers themselves. All were positive, with varying

degrees of enthusiasm, but all leading to a most positive conclusion. The teachers had gained a great deal from the experience and had enjoyed it. Some were a bit wistful, wishing for a return to the former patterns and administration. As Douglas Heath, a psychologist at Haverford College, observed in his study of teacher morale, "Salaries are not unimportant, but the real satisfaction in any profession comes with the chance to continue to develop your potential. Morale is not something you can buy." (8)

Some of the teachers' comments follow:

- I have often reflected on the wonderful times in the company of the gifted children. I found it refreshing and worthwhile to be immersed in an atmosphere where education was given high priority. As an educator I gained so much from the classroom interaction. I can truly say that the time spent in the Astor Program was a challenge and a source of academic and social enrichment.

- I became very impressed by the quality of the teachers in the program, since all around me people were disenchanted with teaching. My experience with the enthusiasm and the dedication of these teachers was a real turn on.

- It was a professional environment. Teachers were teaching in ideal circumstances. It was an incredible opportunity to fully develop teaching skills and creativity. Our administrator was inspired, principled, and dedicated. There was none of the negativism of the usual bureaucracy.

- There was the gratification of knowing that the subject matter being taught was absorbed by the children. In these days, when I hear teachers complain of the frustrations of "talking to the wall", I remember joyfully the feedback and enthusiasm of the children in the Astor Program.

- I appreciated changing the emphasis from a teacher-centered classroom to one that was child-centered; the ability to listen to children and actually hear what is being said; helping children enjoy their individuality.

- The available funds for trips, reference materials, and other teaching aids were invaluable! Also, the encouragement to get out of the classroom by contrast with the usual attitude in most elementary schools of "stay put!"

- There was a camaraderie of interests among all of us. It felt good to be a part of a team which shared the same goals and purposes.

- Learning that a teacher is a guide to the experience of learning- not a breathing encyclopedia- and enjoying the experience of watching someone put the loose pieces of knowledge together in a pattern of a larger understanding

- Working as a teacher in the Astor Program . . . has been exciting, rewarding and the most growth enhancing experience of my career. Your efforts have been beneficial not only to the many Astor children, but also to the fortunate teachers who worked with them in implementing the educational philosophy as well. In individualizing instruction to meet the needs of my students, I discovered some small measure of creativity in myself. In developing curriculum, I tapped my own ability to employ higher level thinking. In the many instances when visitors observed my classes and when I gave workshops to other teachers, I found my self-confidence growing. The erudition, supportiveness, humanism, concern for others, and sincerity of the direction have been an inspiration. I can only hope that through its guidance I have been able to transmit the values of the program to my students.

The results of this aspect of the follow-up study highlight the importance of teacher selection, of involving them in all aspects of the program, and of creating an administrative environment that is conducive to personal satisfaction and professional growth. As we stated in the 1978 report (2), "the crux of any educational program is the teaching staff." The fact that the teachers apparently were satisfied with their experience has undoubtedly been a crucial factor in the continuing success and expansion of the Astor Program.

SECTION IV

THE PARENTS' VIEWPOINT

The survival and success of the Astor Program was due, in large measure, to the active involvement of parents. It was the persistent concern of parents, in letters and telephone calls over many years, that had alerted me to the extent of the problem of the young gifted child. As director of Gifted Child Studies at the New York City Board of Education headquarters office, all requests for information on the gifted were directed to my desk. I began to record the substance of the inquiries, making particular note of the ages of the children about whom questions were asked. The mass of data I collected, over six notebooks, proved to be convincing evidence that attention must be given to the earliest years of schooling. Over 90 per cent of the queries were directed to this age group.

BACKGROUND INFORMATION

When the Astor Program was inaugurated, a requirement was made that the parent(s) or guardian(s) must accompany the child to a first interview, regardless of who had nominated the child for consideration. Later, they were invited to attend orientation sessions, with meetings held both during the day and at night, to accommodate working parents. Classes prepared newsletters in which they kept their families informed of school activities. Parents contributed their services on school trips and fairs, as "lecturers" on special subject areas or for career guidance, and as participants in other school activities.

All had the opportunity to hear full discussions on the philosophy and goals of the program, both in the sessions directed to them and in citywide conferences, where our work was shared with the educational community of the city and its environs.

Parents fought for the continuance of the program when its existence was threatened by local school board decisions; and they organized themselves into one of the largest parent advocacy groups for the gifted in New York State. Many still keep in touch with the former teachers and with the director. They write notes about their children's progress or special success and they continue to seek advice or assistance for their children.

Throughout the period of private funding and in the years following, their opinions and reactions were solicited and carefully considered. There was a follow-up on their reactions immediately after the private funding ended in 1977-78, and again as part of the current study, spanning 1981-83. The following is a discussion of parent reactions as their children were completing elementary school, junior high school, and/or about to enter high school. Generally, as will be seen, parents continue to feel that the Astor Program was a valuable, worthwhile experience for their children; that there were many long-lasting benefits and few, if any, sources of discontent. Many (80%) took the time to add personal comments at the end of the questionnaire we sent and, with few exceptions, these were most favorable.

ANALYSIS OF PARENT RESPONSES TO QUESTIONNAIRE

In interpreting these data, we must keep in mind the following:

1. Parent reactions differ according to the way in which each school did, or did not, follow through on the basic Astor Program philosophy and practices.

2. Parents, somewhat unrealistically, expect local schools to provide all the extra services made possible only by private funding, and become

disappointed when they are not forthcoming. It should be recalled that all had been advised that we were trying to demonstrate how much such gifted children could accomplish under conditions as close to ideal as possible. They also had been warned that local schools would be limited in implementing many aspects of the program by local budgets and practices under tax levy funding.

3. There were marked variations among schools in how they managed the transition. Some very proudly retained the Astor Program name and attempted to meet as many of the established patterns as possible. One (School A) chose to discontinue many of the practices, independently of economics, creating difficulties for the pupils and succeeding in driving many parents to transfer their children to private schools. Fortunately, a change in administration has led to improvements and a partial restoration of earlier patterns. On the whole, however, the success of the program and its obvious benefits to the students have provided a chain reaction through the system, prompting many schools to initiate programs during the early school years. Principals report that they receive calls from their colleagues requesting information on how to proceed in setting up an "Astor Program".

4. Although responses were received from other parents, only those questionnaires are discussed here which relate to the pupil population admitted from February, 1974 through February,]976 and that are included in other sections of this report. The purpose was to be able to correlate the responses from various sources based on a uniform population. Altogether, there were 74 sets of parents in this group who responded to our request for information. Although more gave permission to test and interview their children in school, some just did not return their questionnaires.

5. Also, it is to be noted that only three schools are represented here, which we shall label School A, B, or C, for discussion purposes. Actually there were ten schools involved in the program as of June, 1977, but they had not yet begun their participation during 1974-75.

6. A Note about the Questionnaire. Most of the items asked parents to compare a situation as it was under the Astor Program up to June, 1977, when the funding ended, with the post-funding period after 1977.

COMPARISON OF CURRENT AND EARLY ASTOR PROGRAM SCHOOLING

A first question asked the parents to compare how the educational needs of their children were being met in their current school situation with the early Astor Program years, prior to June, 1977.

More than one-third (35.1%) felt that their children's current educational needs were not being met as well as they had been in the prekindergarten/primary period. Only 13.5% felt that the needs were being met "better" or "much better", and 44.6% felt that there was little or no difference.

When we examine differences in responses by schools, we find that there is a significant difference ($p \leq .05$) between Schools A and B. As was noted earlier, School A had abandoned some Astor Program policies during the transition period, creating considerable parent dissatisfaction. While 45.8% of parents were dissatisfied with the transition at School A, only 19.1 % at School B reported such dissatisfaction.

PARENT EVALUATION OF CURRENT SCHOOLING

In spite of the fact that parents seemed to be happier with the results of the Astor Program and that the students themselves retained pleasant and constructive memories of their experiences (see Section V), the transition to the post-funding period in later grades was also good. Parents reported that their children were happy in their current school (86.5%), interested in their work (83.8%), and eager to learn (78.4%). They found the work to be challenging (63.5%), liked going to school (85.1%), had many friends (77.0%), and liked their teachers (78.4%).

Here again the contrast in responses between Schools A and B to one item proved to be significant ($p \leq .05$). While only 5.7% of parents in School A said their children found the work to be "too easy", 28.6% in School B made this observation. At School A, although parents were dissatisfied with how the school met the educational needs of their children, they felt that the work was "challenging". On the other hand, at School B, where parents were satisfied with how the school met their children's educational needs, a significant number felt the children found the work too easy. This apparent contradiction in reactions may have been due to: 1) the practice of teachers at School A of giving excessive homework assignments and demanding extra work "because these were the gifted Astor Program children," and 2) the efforts of School B to encourage the Astor Program children and ease their passage from elementary to junior high school. It should be noted that, at School B, children spent half time in their Astor Program elementary school and half time at their junior high school.

LONG-LASTING BENEFITS OF THE ASTOR PROGRAM

As had been done in earlier follow-up studies (2,3), we asked parents what long-lasting benefits their children had derived from the Astor Program experience. Almost 90% responded to the item and listed 139 specific benefits. These grouped themselves into nine broad categories. Most were related to the curriculum (25.9%) and specific skills and work habits (16.5%). Relations and companionship with intellectual peers ranked next in importance (20.9%). Other categories dealt with other interpersonal skills and relationships (8.6%), general attitude toward school (5.8%), love of learning (6.5%), quality of teachers (5.8%), and feelings of self-confidence (10.1%).

These categories were quite similar to those reported in the earlier studies, except that there was a tendency for parents to be much more specific about each in their responses to the latest questionnaire.

The current listing, combined with responses to other items, provides convincing evidence of the generally beneficial impact of the Astor Program on these children as viewed by their parents. Certainly participation in the program not only had positive, long-lasting benefits for the students, but it had also prepared them for coping with the more structured and less enriched classes available under the more conventional school practices of their current classes. These responses and those of the students on other questionnaire items, as well as their high levels of achievement in their current schools, reflect on their general adjustment and satisfaction with school.

SOURCES OF DISCONTENT WITH THE ASTOR PROGRAM

Another item in the questionnaire asked whether any sources of discontent as a result of the Astor Program had arisen since the private funding ended.

Of the 74 parent responses, only 14 (18.9%) were traceable to a possible impact of the Astor Program prior to June, 1977. Sixteen (21.6%) were related to failings of the program after 1977, and the remainder (59.5%) reported no dissatisfaction or left the item blank.

It is noteworthy that responses indicating sources of discontent tended to be highly individualistic--clearly related to each child's special problems or to parents' misunderstanding of program goals and procedures. In fact, many remarks cited characterize comparisons with post-1977 events, actually implying satisfaction with the early program, pre-1977, not dissatisfaction. Occasionally, the comments contradict actual classroom practices.

Examples of dissatisfaction were: (Note that, except for distance from home, no source of discontent was duplicated.)

- Teachers should be more aware of possible learning disabilities.
- My child was happy in the program, although we felt the age span within the class was too great.
- Fundamentals of English and math were loosely handled. (See Section V on student achievement.)
- Since many children were already reading, the basics such as phonics were not taught. (Comment. The program did not subscribe to the phonics approach to beginning reading instruction [7]. See Section V on reading achievement.)

- Pupil unable to be with children close to home.

- Basic math and spelling could have been emphasized more . . . Repeated drills would have ensured a basic strong foundation. (Comment. In view of the high achievement levels of the pupils [2] the minimizing of drill as a regular classroom procedure seems justified.)

SPECIAL STUDENT INTERESTS RELATED TO THE ASTOR PROGRAM EXPERIENCE

When we asked parents whether their children had developed any special interests that were related to their early schooling experience, many mentioned subjects/topics that corresponded to the students' responses, although the latter did give more detail and a greater variety. Actually, 51.4% (38) of parents listed Astor Program-related topics. These are listed below: (The percentages are based on the 38 parents reporting specific activities. Some parents listed more than one area.)

31.6%	Science related subjects, i.e., bird watching, astronomy, marine biology, etc.
26.3%	Fine arts, i.e., painting, sculpture, music
18.4%	Creative writing
15.8%	Mathematics
15.8%	Reading, literature, science fiction
13.2%	Foreign language, especially French
13.2%	Drama
10.5%	Computers
7.9%	Strategic games, i.e., chess
5.3%	Just about everything
2.6%	Leadership

VOCATIONAL GOALS OF STUDENTS, ORIGINATING IN ASTOR PROGRAM EXPERIENCE

We asked parents whether their children had expressed an interest in any particular line of work and whether the interest was related to the early Astor Program experience.

While 74.3% did list some interest expressed by their children, 39.2% related the interest directly to the Astor Program experience. The areas mentioned were: science (astronomy, marine biology, botany, physics, medicine, veterinary medicine), mathematics and computer science, the arts and music, and psychology. Onee again, it is interesting to note how much more information was given by the students themselves. (See Section V on student reactions.)

PARENTS' COMMENTS

A very pleasant aspect of this study was the willingness of parents to take time to share rather lengthy comments and observations with us. Of the 74 parents involved in this part of the study, 80% took the time to add comments to their questionnaire. Of these, 92% were favorable and 8% were of a mixed or neutral nature. Many of the parents who wrote favorably about the pre-1977 years did make comparisons with the later years which reflected their concerns with the transition from private to public funding and the limitations of public school practices. Their concerns have been discussed in other sections of this report. Briefly, they include lack of understanding by teachers in later grades, exceptionally large classes, lack of structure and discipline, insufficient "drill" in phonics, grammar, arithmetic, etc. As stated earlier, some of these statements reflect problems of individual children or a misunderstanding of the goals and practices of the program.

Excerpts from the parents' comments follow. (These have been edited slightly for clarity of reference and to protect student anonymity.)

I found that my son was lacking in writing skills, such as preparing book reports, and still has trouble with picking out main topics and time order. However, his teachers are not concerned at this time. He had wonderful math experiences in the Astor Program. There were many math toys and games available to him. They took nice trips and there was great camaraderie among the class children.

I think her first two years in the Astor Program were a beautiful and exciting introduction to school and learning in general. I hate to think of the dampening effects a regular public school program would have had. The stimulation of teachers and classmates and the exuberant classroom activity could not be duplicated.

I removed my son from the Astor Program in June, 1977 because he was having difficulty learning to read. He needed a more structured approach to reading than the Astor Program provided. For the regular setting, he received the type of reading instruction he required. However, much to my dismay, I discovered that the positive aspects of the Astor Program were not to be found in other classes he attended.Compassionate, caring teachers; a positive, warm learning atmosphere; individualization of instruction; an attitude that learning can be fun and exciting; an emphasis on higher level thinking skills; learning activities that encouraged creative thinking were all characteristics that I found to exist in the Astor Program and were virtually nonexistent in his classrooms outside of the program. My son is now reading above grade level, but he has a very negative attitude toward school.

I am very pleased that my daughter had the opportunity to participate in the Astor Program. My only regret is that she was always the "baby" of the class, with many of the children in the class almost two years older and far more advanced and aggressive than she was. She may have been intimidated by that--although I am not sure. She has a very healthy feeling about herself and is an extremely interesting person. If the Astor Program helped to develop these traits, God bless you!

My husband and I thank you and your staff for giving our son the opportunity to have been in the Astor Program. As he is about to enter high school next fall, he seems to be well adjusted, sensitive, and extremely interested in most of his classes. That, I am sure is due to the Astor teachers. I hope his learning skills from the past nine years will aid him in becoming a wholesome and dedicated young man ... Thank you from the three of us.

I felt that Astor was too different from the public school's financial abilities. There were too many teachers for very few students. I liked the impact on student selection and tracking.

We liked the special enrichment features in the Astor Program, like foreign language, that are not part of the Board of Education curriculum.

The Astor Program provided an excellent experience for our son that this questionnaire doesn't measure. It provided him with a learning experience that helped him to grow emotionally and intellectually with other children and interested teachers. The key to the program is quality teachers who have real knowledge, understanding and creativity in teaching gifted. This provides them with expanding challenges while learning basic information. Unfortunately, following June, 1977, the teacher selection varied, the class size exceeded acceptable limits for any class, let alone a gifted class where functioning levels varied far more than in a regular class.

I think that our daughter's most admirable quality is that she knows and likes herself. I'm sure the fine education and incredible amount of caring she received in her years in the Astor Program have been a contributing factor. Another facet of her personality that is valuable is that she isn't afraid to be different. As she approaches adolescence she seems to be more influenced by her own fine instincts than those of her peers.

The Astor Program was an extremely valuable experience for my son. He is now very well rounded, creative and eager to learn. He is a very good problem solver and is very creative in every area. He has had unique learning experiences in the Astor Program and superb teachers. His best friends are the children he has been going to school with. They learn from each other and have developed mutual interests.

We think it is wonderful that the program located gifted children of all ethnic and racial origins, rich and poor. Our son will never think that all X's are lazy and stupid or adhere to other stereotypes. By finding some children from backgrounds which were deprived of the things that we have (we are professionals) you have probably ensured the future of some children who might have been lost in the overcrowded usual classroom. I think of one child in particular from a very difficult family situation who has been our son's good friend, and who has been looked after by certain teachers, and who may therefore "make it" in the productive middle class. If you have saved even one child from the kind of neglect that leads to boredom, indifference, or worse, you will have done a great deal of good. That is not, of course, all you did. We thank you as fervently as we can for a program which suited our son ideally, and for all the planning, personnel selection, and effort that went into this achievement. Without the program, education of the gifted in our school district would not have come as far as it has, because parents heard of the program and wanted something like it. Without the program, our son would not have experienced so much of the joy of learning or made such interesting friends. ... . We are glad to thank you officially here.

SECTION V

STUDENTS: CURRENT ACHIEVEMENT AND REACTIONS TO THEIR EARLY EXPERIENCE

Even though we have reviewed other aspects of the Astor Program in the foregoing pages, the specific focus of our concern was the students themselves. It was necessary to explore the forces that would inevitably affect their educational experiences following the "pioneer" years in the Astor Program; but the ultimate goal was to learn what they had achieved and how they felt about the experience. This section is a summary of what we learned from and about the students and the impact of the Astor Program on their later schooling.

PRESENT STATUS OF THE EARLY ASTOR PROGRAM STUDENTS

Every effort was made to trace as many students as possible and to obtain current school records of achievement on standardized tests. This, in itself, proved to be a long and difficult process, as was stated earlier. Of special importance here is the grade level of the students at the time of this research. Because of differing practices in the several school districts, students had advanced at various rates. Some had been accelerated two or more grades in elementary school. Some, attending New York City schools, were placed in accelerated (SP - Special Progress) classes, so that they would complete grades 7-8-9 in two years. Others, who had transferred to private schools or had moved out of the city to other localities, were advanced according to local practices. Thus, the grade range of the pupils as of 1981-82 was from grade 6 to grade 8, with a few already in grade 9 or high school.

ACHIEVEMENT IN READING AND MATHEMATICS

As was summarized in the 1978 report (2, p.180), after two to three and one-half years of exposure to the Astor Program in prekindergarten through grade three, there were "statistically significant gains in achievement, specifically in the areas of word knowledge, reading, and mathematics, ... in comparison with a national norming population of high achievers."

A question that is frequently raised about gifted children, especially when they are identified at an early age, is: "Do they continue to achieve at the levels they attained during the early years?" The following analyses are an attempt to answer this question. However, there were many factors that had to be considered before they could be made. These included test variety, the uses of percentile scores, comparability of the pupil population with the basic group, the groups to be used, and the numbers available in each category.

Test Variety

Since we were dealing with different school systems, we had to determine how data from different tests could be used. These criteria were established:

1. All had to be well recognized standardized tests with comparable sub-parts and national norms, such as the California, Metropolitan, or Stanford Achievement Tests. As it turned out, almost all the test results were derived from records of the New York City public school system, which in 1980-82 used the California Achievement Tests in Reading and the Stanford Tests in Mathematics. Of the 129 students involved in the achievement study, there were records available for nine who were in schools outside the

city. These were based on the following tests, all nationally normed: Stanford, California, SRA, Iowa, and Lorge-Thorndike Cognitive Abilities.

2. All achievement test data used were based on the most recent tests taken in the spring for each grade, 6 through 8. Ninth grade results were not available.

The Use of Percentile Scores for Comparisons

The reporting of achievement scores varies from system to system and school to school. They use grade equivalents, stanines, percentiles, standard score, and even raw scores alone. However, most data could be translated to percentiles from tables provided by test publishers.

In terms of interpretation, the percentile yields the most straightforward basis of comparison, provided no elaborate statistical treatment is required. We resorted to reporting the per cent of pupils attaining given percentiles, thus yielding a figure that could be treated statistically, if desired. However, considering the many variations in pupil conditions, including current grade level, location, school system, etc., anything more complex could not be justified and could only prove misleading.

Comparability of Pupil Population with Basic Group

Another point that must be considered in a longitudinal study is: "How similar is the follow-up population to the original group with which it is being compared?"

Since this was a program designed specifically for the intellectually gifted, IQ levels of the groups being compared are most relevant. Records were available for all pupils who were admitted in 1974-76 into Level I,

the prekindergarten/kindergarten classes. For those who were added to the Astor Program classes after June, 1977, IQ's were available for 75 percent of the students. The distribution of IQ's for the latter group may be considered approximately equal to the others first, because of the data on hand for such a large proportion of the group and second, because of the exceptionally high achievement records of all these pupils. Their addition to the Astor Program classes was made on the basis of exceptional performance in reading and mathematics at the time of admission.

The mean Stanford-Binet IQ for the original population in 1974-75 for the classes used in this study was 149.5. For the total sample used in this report, the mean was 145.9. The average IQ's for each sub- population (described in the next section) were: 146.1, 148.2, and 144.8. Thus, it will be seen that the groups used in the follow-up study were comparable to the total basic population and to each other in intellectual capacity.

The Three Sub-Groups of the Longitudinal Study

Data were obtained for students who had been exposed to varying periods of time under the Astor Program. Therefore, three major groups were defined:

I - Pioneers, 1974,75-77: Pupils who had been in the Astor Program prekindergarten or kindergarten (depending on age of admission) through June, 1977.

II - Pioneers, 1974,75-81,82: Pupils who remained with the program in the original school through grade 6.

III - Added Group, 1977-81,82: Pupils who were added to Astor Program classes after 1977, when the private funding ended, and who remained with them through grade 6.

Achievement data are presented separately for these three groups.

Numbers of Pupils in Each Category

Since we were not able to obtain complete records for many students, the numbers will vary from analysis to analysis, both in the achievement study and in the report on student reactions. Achievement records were available for a total of 129 students: 16 in the Pioneer 1974,75-77 group; 53 in the Pioneer 1974,75-81,82 group; and 60 in the Added group, 1977-81,82.

ANALYSIS OF THE ACHIEVEMENT TEST DATA

Test subjects are, in effect, dictated by convention. The practice generally seems to be to give achievement tests in vocabulary, reading comprehension, total reading, and total mathematics. Since we had used these tests to comform to city school practices in our earlier study, we were limited to such data.

Reading: Total Score, Vocabulary, Comprehension

Table I summarizes the results for the three pupil groups for the Total Score in Reading. In Group I, Pioneers 1974,75-77, 43.9% attained percentiles ranging from 96 to 99+, in the ninth stanine; and 37.6% attained percentiles in the eighth stanine, from 90 through 95. Thus, 81.5% attained scores in the 90th percentile or above. For Group II, Pioneers 1974,75-81,82, the record is somewhat similar: 52.8% with percentiles in the ninth stanine, from 96 to 99+; 28.3% in the eighth stanine, from 90 through 95. Thus, 81.1% attained scores at the 90th percentile or above, very much like Group I. For the Added Group III, 48.3% achieved percentiles in the ninth stanine, from 96 to 99+; 23.3% in the eighth stanine, from percentiles 90 to 95; and 71.6% with percentile ratings from 90 through 99+, lower than for Groups I and II.

TABLE I

ACHIEVEMENT IN READING: TOTAL SCORE

		PIONEERS 1974,75-77			PIONEERS 1974,75-81,82			POST-1977 GROUP		
Stanine	%ile	F	%	% per Stanine	F	%	% per Stanine	F	%	% per Stanine
5	41-49									
	50-59				1	1.9	1.9	1	1.7	1.7
6	60-69				1	1.9		2	3.3	
	70-77	2	12.5	12.5	1	1.9	3.8			3.3
7	78-81				2	3.8		3	5.0	
	82-85	1	6.3		4	7.5		6	10.0	
	86-89			6.3	1	1.9	13.2	5	8.3	23.3
8	90-91							4	6.7	
	92-93	3	18.8		7	13.2		5	8.3	
	94-95	3	18.8	37.6	8	15.1	28.3	5	8.3	23.3
9	96	1	6.3		1	1.9		8	13.3	
	97	1	6.3		5	9.4		3	5.0	
	98	3	18.8		8	15.1		6	10.0	
	99	2	12.5	43.9	14	26.4	52.8	12	20.0	48.3
Total		16			53			60		

Generally, almost all the students were achieving at above average levels, most of them above the 90th percentile, and an impressive 44 to 53 per cent at percentile levels ranging from the 96th through 99+.

Additional Note. In 1981, 21 of 22 sixth grade Astor Program students achieved maximum scores on the Reading Test, with maximum grade equivalent scores of 12.9. The one exception achieved a grade equivalent score of 9.5. In part, this reaching of ceilings on tests reflects the weakness of many achievement tests in discriminating scores for high ability students. Nevertheless, the record of these pioneer Astor Program students was quite impressive. They also managed to gather almost every award their school distributed at graduation. The only reason several did not receive multiple awards was because the principal felt that he had to "spread the glory."

TABLE II

ACHIEVEMENT IN READING: VOCABULARY

		PIONEERS 1974,75-77			PIONEERS 1974,75-81,82			POST-1977 GROUP		
Stanine	%ile	F	%	% per Stanine	F	%	% per Stanine	F	%	% per Stanine
5	41-49	--	----		1	2.0		--	----	
	50-59	1	7.1	7.1	--	----	2.0	2	3.6	3.6
6	60-69	1	7.1		--	----		1	1.8	
	70-77	--	----	7.1	6	11.8	11.8	3	5.5	7.3
7	78-81	1	7.1		3	5.9		6	10.9	
	82-85	1	7.1		--	---		--	----	
	86-89			14.2	6	11.8	17.7	7	12.7	23.6
8	90-91	--	----		2	3.9		5	9.1	
	92-93	1	7.1		3	5.9		7	12.7	
	94-95	2	14.3	21.4	5	9.8	19.6	3	5.5	27.3
9	96	2	14.3		12	23.5		9	16.4	
	97	1	7.1		1	2.0		1	1.8	
	98	1	7.1					7	12.7	
	99	3	21.4	49.9	12	23.5	49.0	4	7.3	38.2
Total		14			51			55		

On the Vocabulary section of the reading tests, Groups I and II, the Pioneers, performed equally well at the highest levels. In the ninth stanine, 49 per cent of each group attained percentile scores from 96 through 99+. At the eighth stanine, 21.4 per cent and 19.6 percent of Groups I and II attained scores at percentile levels from 96 through 99+. Although the Post-1977 Group did a ltte better in the eighth stanine, 27.3%, than the others, they did not match the Pioneers at the highest levels, percentiles from 96 through 99+. (Table II)

TABLE III

ACHIEVEMENT IN READING: COMPREHENSION

		PIONEERS 1974,75-77			PIONEERS 1974,75-81,82			POST-1977 GROUP		
Stanine	%ile	F	%	% per Stanine	F	%	% per Stanine	F	%	% per Stanine
5	41-49									
	50-59				1	2.0	2.0	2	3.6	3.6
6	60-69				2	3.9				
	70-77				1	2.0	5.9	2	3.6	3.6
7	78-81							3	5.5	
	82-85	4	28.6		2	3.9		7	12.7	
	86-89	1	7.1	35.7	5	9.8	13.7	6	10.9	29.1
8	90-91				2	3.9		5	9.1	
	92-93	1	7.1		3	5.9		2	3.6	
	94-95	1	7.1	14.2	7	13.7	23.5	6	10.9	23.6
9	96	1	7.1		5	9.8				
	97	3	21.4		6	11.8		9	16.4	
	98	2	14.3		1	2.0		2	3.6	
	99	1	7.1	49.9	16	31.4	55.0	11	20.0	40.0
Total		14			51			55		

The results in Reading Comprehension (Table III) are similar to the other reading scores, which is to be expected, since vocabulary and comprehension are component sections of the total score. Pioneer students performed better than the Post-1977 Group at the highest level, stanine 9, with 49.9 per cent of Group I and 55.0 per cent of Group II achieving percentiles ranging from 96 through 99+. Only 40.0 per cent of students in the Post-1977 Group attained these levels.

TABLE IV

ACHIEVEMENT IN MATHEMATICS: TOTAL SCORE

		I PIONEERS 1974,75-77			II PIONEERS 1974,75-81,82			III POST-1977 GROUP		
Stanine	%ile	F	%	% per Stanine	F	%	% per Stanine	F	%	% per Stanine
5	41-49	--	----		--	----		--	----	
	50-59	--	----		--	----		--	----	
6	60-69	2	12.5		1	2.0		--	----	
	70-77	--	----	12.5	1	2.0	4.0	1	1.7	1.7
7	78-81	1	6.3		1	2.0		2	3.4	
	82-85	1	6.3		1	2.0		3	5.2	
	86-89	2	12.5	25.1	6	12.0	16.0	5	8.6	17.2
8	90-91	--	----		2	4.0		2	3.4	
	92-93	2	12.5		5	10.0		2	3.4	
	94-95	--	----	12.5	3	6.0	20.0	5	8.6	15.4
9	96	1	6.3		2	4.0		2	3.4	
	97	2	12.5		4	8.0		8	13.8	
	98	1	6.3		6	12.0		6	10.3	
	99	4	25.0	50.1	18	36.0	60.0	22	37.9	65.4
Total		16			50			58		

Mathematics: Total Score

Table IV summarizes the mathematics achievement data for the three groups. Although it is not to be expected that students will achieve at percentile levels that are comparable from test to test, it is noteworthy that the Astor Program pupils attained scores in mathematics that are about as high as those they had in reading. All scores in mathematics were at percentile levels above the fifth stanine.

In Group I, 50.1% of the pupils attained percentile scores from 96 to 99+; 12.5%, from 90 through 95; or 62.6% from the 90th through the 99th percentiles. In Group II, those who remained through the sixth grade, 80.0% achieved scores

above the 90th percentile; 20.0%, from the 90th through the 95th percentiles; and 60.0%, from the 96th through the 99+ percentile levels.

However one interprets these data, there is no doubt that the Astor Program students are, at the very least, maintaining their high standards of achievement in mathematics as well as in reading.

Changes in Achievement Status

Although as a group the children performed at high levels in their latest tests, it is well to explore another part of the picture. A more specific aspect of the question about achievement is: "To what extent did individual students retain their relative achievement status in later grades, when compared with their status at the end of the funding period?" To answer this question, individual comparisons were made between percentile rankings in 1977 and in 1981-82, depending on the last grade level for which records were obtained.

Achievement-Reading Total: From Table V we find that more than two-thirds (67.2%) of the students either retained the status achieved in 1977 on the total reading score or advanced beyond it, while 32.6% slipped back to lower levels. In the highest group, over two-thirds still achieved at levels at or above the 90th percentile, and only six (11.5%) pupils fell below that level.

Even though some variations in performance are to be expected, some discrepancies do suggest the need for further investigation. Statistically, six pupils may not be a matter of concern. To those of us who have known these students for many years, such records are troubling. In checking the data

TABLE V

READING: STATUS CHANGE IN ACHIEVEMENT - 1977 versus 1981,82

Stanine → / ↓ %ile		4 23-40	5 41-59	6 60-77	7 78-89	8 90-95	9 96-99	f	%
4	f							-	
23-40	%								-
5	f							-	
41-59	%								-
6	f							-	
60-77	%								-
7	f		1		1	3	2	7	
78-89	%		1.9		1.9	5.8	3.8		13.4
8	f					2	2	4	
90-95	%					3.8	3.8		7.6
9	f			1	5	10	25	41	
96-99	%			1.9	9.6	19.2	48.1		78.8
TOTALS	f		1	1	6	15	29	52	
	%		1.9	1.9	11.5	28.8	55.7		99.8

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for each, we could find no valid explanation there for the decline. However, our experience with other scores did make us cautious. It is and should be a matter of concern to those who enter data on permanent records when a student's scores are inconsistent with previous or current performance. In two instances, for example, we rejected records as invalid because the discrepancy between sub-parts and the total scores defied common sense, let alone statistical possibility. In another case, we were aware of a serious crisis in the child's home that was obviously interfering with performance. In still another instance, we found that the wrong norms had been used.

From a purely psychometric viewpoint, the inadequacy of many tests for measuring the achievement of highly gifted children becomes more and more apparent as maximum scores are achieved by large numbers of students, with little or no discrimination among them. These observations apply to both curriculum areas reported here, reading and mathematics, and probably apply to other tests as well.

Achievement-Mathematics: It was possible to repeat the status change analysis in mathematics for 50 students, 25 boys and 25 girls. Basically, the students did very well indeed, 80% maintaining or exceeding their earlier rankings. (Table VI) Of the 22 students who had attained earlier scores at the 96-99 percentile levels, 7 slipped back to lower levels in the latest testings. Of the seven, only one was a boy. By contrast, of the 16 students who advanced beyond their earlier status, three-fourths (12) were girls. The nature of our data is such that further analysis could prove misleading. However, in the current climate of comparisons between male and female achievement in mathematics, these notes may suggest directions for future study.

TABLE VI

MATHEMATICS: STATUS CHANGE IN ACHIEVEMENT - 1977 versus 1981,82

Stanine → / ↓ %ile		4 23-40	5 41-59	6 60-77	7 78-89	8 90-95	9 96-99	f	%
4	f							-	
23-40	%								-
5	f					1	1	2	
41-59	%					2.0	2.0		4.0
6	f					2	4	6	
60-77	%					4.0	8.0		12.0
7	f			1	4	1	6	12	
78-89	%			2.0	8.0	2.0	12.0		24.0
8	f			1	1	5	1	8	
90-95	%			2.0	2.0	10.0	2.0		16.0
9	f			1	5	1	15	22	
96-99	%			2.0	10.0	2.0	30.0		44.0
TOTALS	f	-	-	3	10	10	27	50	
	%			6.0	20.0	20.0	54.0		100.0

Achievement of Astor Program Students versus Others in Current Classes

It was also possible to obtain data for some Astor Program students who had advanced to the junior high school within the city school system and to compare their status within the class they were currently attending. These classes varied from being comprised almost totally of Astor Program gifted students to representing a wide range of abilities. The following discussion of this topic is based on data presented in Tables VII and VIII.

Other students for whom achievement data were available were traced to other junior high schools in the city. In these cases, only one to three Astor Program students were in each class, some of which were part of the city's established secondary sequence for the gifted. These are known as SP (Special Progress) or SPE (Special Progress Enriched) classes, depending on whether they complete the 7-8-9 grade sequence in two or three years, respectively.

In all but three cases, these students maintained their high levels of achievement in both reading and mathematics, attaining standardized test scores above the 90th percentile and, in most instances, the highest grade equivalent possible for the test given (Reading = 12.9; Mathematics = HS). One of these three was a boy (Table VII, Class E-6) who had obviously been placed in a heterogeneously grouped class, where reading levels were far below the level he had reached and who, subsequently, had to be persuaded to return to school. He protested that he was bored, tired of repeating work over and over again and that he had mastered long ago in elementary school.

Two groups advanced to classes in the junior high school which were dominated by Astor Program students. Of those who were in grade 8 in 1982, 13 out of 22 students in one SPE class were former Astor Program students

TABLE VII

ACHIEVEMENT OF ASTOR PROGRAM STUDENTS COMPARED WITH OTHERS IN THEIR CURRENT CLASS: READING

School	Class	Grade* Equivalent (highest)	Total Class f	Total Class N	Astor Program Students f	Astor Program Students N
Grade 7						
A	1	12.9	18	26	17	24
B	2	12.9	15	39	3	3
C	3	12.2+	6	34	1	1
D	4	12.9	11	36	1	1
E	5	12.9	15	33	1	2
E	6	10.5	0	27	1	1
Grade 8						
A	7	12.9	22	22	13	13
C	8	12.9	25	34	2	2
E	9	12.9	27	36	1	1
E	10	12.9	8	26	1	1
E	11	12.9	9	34	1	1
F	12	10.8+	9	32	1	1

*Percentiles for grade equivalent of 12.9 range from 93 to 99, mostly above 95. Grade equivalents listed are the highest achieved in the class.

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TABLE VIII

ACHIEVEMENT OF ASTOR PROGRAM STUDENTS COMPARED WITH OTHERS IN THEIR CURRENT CLASS: MATHEMATICS

School	Class	Grade* Equivalent (highest)	Total Class f	Total Class N	Astor Program Students f	Astor Program Students N
Grade 7						
A	13	H.S.	26	26	24	24
B	14	H.S.	7	39	3	3
C	15	8.9+	24	34	1	1
D	16	H.S.	8	36	1	1
E	17	H.S.	11	33	1	2
E	18	H.S.	2	27	1	1
Grade 8						
A	19	H.S.	22	22	13	13
C	20	H.S.	33	34	2	2
E	21	H.S.	12	36	1	1
E	22	H.S.	6	26	1	1
E	23	H.S.	13	34	1	1
F	24	H.S.	17	28	1	1

*Minimum grade equivalent achieved by Astor Program students in class.

(Class A-1). The grade 7 class consisted almost entirely of Astor Program children, 24 out of a total of 26 (Class A-7).

In both classes, performance on reading and mathematics tests for the Astor Program students was excellent. Seventeen of the 24 Astor Program students in the seventh grade achieved scores equal to maximum grade equivalents of 12.9 in reading on the California Achievement Tests and a grade equivalent of HS (High School Level) in mathematics (Stanford Tests). Percentiles of a grade equivalent of 12.9 range from 93 to 99+. For the eighth grade students, the scores for the entire class were exceptionally high. All, both Astor Program and other students, attained grade equivalents of 12.9 in reading and HS in mathematics.

Summary: Achievement in Reading and Mathematics

The foregoing analyses, taken from several viewpoints, lead to the gratifying conclusion that students who had been part of the Astor Program during their prekindergarten/primary grade years, on the whole, retained their high level of achievement or exceeded it in later years. The deterioration in performance that is often predicted for such children who are identified early did not occur. If anything, the early preparation they received may have helped them acquire the skills, knowledge, and self-confidence necessary for later achievement.

PUPIL REACTIONS TO THEIR ASTOR PROGRAM EXPERIENCE

While achievement in specific curriculum areas is an important aspect of school and, apparently, the greater proportion of the former Astor Program children maintained or exceeded their high performance levels, pupil satisfaction with school was an equally important component of their experience. We followed through on this aspect of the study by using tests, questionnaires, and personal interviews.

The Attitude Scales

As had been done in the 1978 follow-up, we investigated the pupils' reactions to aspects of school with a set of attitude scales. In the earlier study, pupil responses were generally favorable. They liked school as a whole, their classmates and teachers, reading and learning, and, although still positively inclined, mathematics least. The scale used for the earlier study was, of necessity, simple in design because the children were so young at the time. There were only three possible responses--like, dislike, and neutral. As was to be expected, there were very few negative or even neutral responses(4). Average ratings were very positive, and negative responses were rare (2, pp. 177ff.)

In the present follow-up, a more sophisticated instrument was possible. Semantic differential seven-point scales were developed for ten aspects of school: learning, teachers* (two), classwork, reading, classmates, mathematics, discussion, handwriting, homework, and school in general. There were from five to nine items in each scale, with ratings ranging from one through seven, with seven being the most positive. The scale items were based on the work of Osgood et al. (10).

*Early Astor Program classes usually had two regular classroom teachers.

Students were asked to react to each of these aspects of school as they recalled them from earlier years, from pre-kindergarten through grade 3. In Astor Program classes, children were grouped by levels instead of grades. The correspondence of levels and grades was as follows:

Level I - Pre-K, K or K - 1

Level II - 1 - 2

Level III - 2 - 3 - 4

A few children, because of their age at admission were actually in grade 4 by the time they had reached the Astor Program Level III.

Thus, children were asked to recall their reactions to the eleven aspects of school at each of the three levels. They were also asked to react to the same aspects (except for handwriting and a second teacher) for their current class, which might be grade 6, 7, or 8. It will be recalled that these children might be in a variety of situations at this time, some still associated with Astor Program practices, others in mixed classes or even in other school system.

The following trends will be noted from a study of Tables IX-XIV.

1. All reactions are generally positive across all levels, even for the very least liked aspect of "homework". No mean ratings fell into the neutral of negative categories. As a matter of fact, negative ratings were rare.

2. For those students who had been in the Astor Program from the beginning, Groups I and II, there is a noticeable, if not significant, decline toward the neutral rankings for the current class in several items,especially attitudes toward current classmates and classwork. They apparently enjoyed their work in the early grades more and the company of classmates they liked.

In an accompanying questionnaire, many students reported that they still consider as "best friends" students they met during the pioneer years of the program.

3. The pre-K, K years or Level I are recalled with most favorable reactions, especially by those who left the program in 1977.

4. Although the higher levels are also remembered very favorably, there is a slight movement downward as the grades progress. This is consistent with observations in other studies about pupil attitudes toward school (4).

5. As was hoped in the Astor Program philosophy, the students acquired a love of learning and reading which has persisted and even increased in intensity with the passage of time.

6. Students, with few exceptions, recall their teachers in a favorable light, especially those in the prekindergarten/kindergarten years.

7. Mathematics is well liked, but not as much as reading, the liking increasing in later grades.

8. Least popular subjects are consistently handwriting and homework.

9. The rankings of aspects remain approximately the same from level to level, even in the current grade, except for mathematics. It seems that, as children progressed through the grades, their liking for mathematics increased. The love of learning and reading persists, and both areas receive top ratings in the current grade.

Special Subjects Recalled from Early Grades

Since the Astor Program had introduced a far more advanced and "differentiated" curriculum to the classes, we were interested in learning what lasting impression the experience had made. In one questionnaire, the students

were asked: "What are some of the special subjects you learned about in Level I (PreK-K)?"

There was a marked contrast in recollections between students who had entered the Astor Program at the PreK-K level and those who had been added after 1977 in the fourth grade and above. While early Astor Program children remembered a wide variety of subjects and activities, the later group recalled very little and cited only the most conventional primary subjects. An unusually large proportion of children among the later admissions do not remember anything special that they learned during the early years. While only 9.4% to 14.0% of the pioneer Astor Program pupils could not recall anything special they had learned in prekindergarten through grade 3, from 34.3% to 50.0% of the later admissions from other classes could not recall anything special that they had learned during those early years. All of these differences are statistically significant, with $p \leq .01$. (Table IX)

TABLE IX

COMPARISON OF STUDENT RECOLLECTIONS OF SPECIAL SUBJECTS STUDIED IN PREKINDERGARTEN THROUGH GRADE 3

	Early Admissions		Later Admissions		
Level	N*	%	N*	%	p
I	50	14.0	68	50.0	.01
II	53	9.4	73	39.7	.01
III	51	11.8	70	34.3	.01

*Differences in numbers responding are due to pupil omission of the items.

Also significant is the quality of the recollections. Those who attended other classes during the early years recalled such routine subjects as learning the alphabet, arithmetic, writing, spelling, counting, etc. Pioneer Astor Program children mentioned such subjects as astronomy, the planetary system, architecture, probability, ancient Egypt, ecology and nature, creative writing, science, etc. Apparently French was a favorite subject, recalled by 30%, 24,5%, and 13.7% of the children for each grade sequence or level. It was not expected that the children admitted to later grades would mention learning a foreign language, since this is not a common practice in the schools, certainly not at this age. Yet, it is precisely at this age level that children do pick up foreign languages, probably with greater ease than in later years. The pioneer children obviously enjoyed learning the language, as they reported in taped interviews as well as in the questionnaire.

In Tables X and XI, responses of the pupils with respect to special topics they learned in the first three levels are given. The great variety of topics mentioned, especially by the Astor Program pioneers, will be noted. Also noteworthy are several instances where the responses of the two groups are sufficiently different to be statistically significant. These are discussed in the following sections.

Reading. In the analyses, reading was examined as a topic separate from the other language arts. It was interesting to note that a significantly larger proportion of pioneer students recalled their earliest reading experiences in PreK-K, 28.0% vs. 8.8% for the later admissions. ($p \leq .01$) The reading experience was important to all the students, as they commented in

TABLE X

READING: RECOLLECTIONS OF SPECIAL TOPICS STUDIED - Frequency of Mention

Topic*	Level I		Level II		Level III	
	Pioneer f	Other f	Pioneer f	Other f	Pioneer f	Other f
Reading	13	6	7	16	9	7
Book Reports	-	-	-	-	-	1
Advanced	1	-	-	1	-	-
Literature	-	-	1	1	-	-
SRA	-	-	1	-	-	-
Total	14	6	9	18	9	8
Per Cent	28.0	8.8	17.0	24.7	17.6	11.4
Number of Pupils	50	68	53	73	51	70

*Topics are listed in language as expressed by the students.

interviews and showed by their reactions on the attitude scales. The early encouragement and exposure to reading are evident in the pioneers' recollections. For students admitted after 1977, the experience would usually come later, in grades one and two, and this is reflected in their responses for that level, where the frequencies for this later group are greater than those for the pioneer group. The difference, however, is not statistically significant. (Table X)

Language Arts. The basic skills of the language arts were analyzed separately from reading and literature. Included in this category were such specifics as learning the alphabet, grammar, word structure, vocabulary, dictionary work and word games, spelling, handwriting, creative writing and reports. As is characteristic of the early recollections of the non-pioneer students, there is a focus on the conventional curriculum and basic skills

of the language arts. While 32.4% of these pupils recalled these aspects from their kindergarten period, only 14.0% of the pioneer group did so. This is a statistically significant difference, with a $p \leq .05$. Recollections for the later grades followed the same trends, but were not statistically significant. (Table XI)

TABLE XI

LANGUAGE ARTS: RECOLLECTIONS OF SPECIAL TOPICS STUDIED - Frequency of Mention

Topic*	Level I		Level II		Level III	
	Pioneer f	Other f	Pioneer f	Other f	Pioneer f	Other f
Language Arts	-	-	3	1	1	1
Alphabet	3	8	1	-	-	-
English	1	-	1	-	1	1
Grammar	-	-	2	1	1	1
Vocabulary	-	-	-	1	-	-
Dictionary Work	-	-	1	-	-	-
Word Games	-	1	-	-	-	-
Spelling	2	5	5	6	8	4
Handwriting	1	7	3	6	4	8
Creative Writing	-	1	1	1	1	3
Writing Reports	-	-	-	1	-	-
Total	7	22	17	17	16	18
Per Cent	14.0	32.4	32.1	23.3	31.4	25.7
Number of Pupils	50	68	53	73	51	70

*Topics are listed in language as expressed by the students.

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Social Studies. Although students mentioned specific areas of the social studies curriculum, including geography, history (American and Black), ancient Egypt, New York City, and research activities, there were no notable differences in the recollections of the two groups. (Table XII)

TABLE XII

SOCIAL STUDIES: RECOLLECTIONS OF SPECIAL TOPICS STUDIED - Frequency of Mention

Topic*	Level I		Level II		Level III	
	Pioneer f	Other f	Pioneer f	Other f	Pioneer f	Other f
Social Studies	-	1	1	1	6	8
Geography	-	-	-	-	1	-
History	-	-	-	1	-	4
History-American	-	-	-	-	1	-
History-Black	-	1	-	-	-	-
Ancient Egypt	-	-	1	-	-	-
New York City	-	-	-	-	1	-
Research	-	-	-	-	-	1
Total	0	2	2	2	9	13
Per Cent	0.0	2.9	3.8	2.7	17.6	18.6
Number of Pupils	50	68	53	73	51	70

*Topics are listed in language as expressed by the students.

Science. The area of science yielded some of the most dramatic differences between the two groups. Recollections of pioneer students included such specific topics as a science fair, trips, astronomy, solar system, atomic structure, ecology, nature study, trees, archeology, zoology, animals, dinosaurs, nutrition, and weather. For the first two grade sequences, the

TABLE XIII

SCIENCE: RECOLLECTIONS OF SPECIAL TOPICS STUDIED - Frequency of Mention

Topic*	Level I		Level II		Level III	
	Pioneer f	Other f	Pioneer f	Other f	Pioneer f	Other f
Science	3	1	4	2	4	5
Science Fair	-	-	1	-	-	-
Trips	-	-	-	-	1	-
Astronomy	2	-	-	-	1	-
Solar System	1	-	-	-	-	-
Atomic Structure	-	-	-	-	2	-
Ecology	-	-	1	-	-	-
Nature	5	-	2	-	5	2
Trees	-	1	1	-	1	-
Archeology	-	-	-	-	-	1
Zoology	-	-	1	1	-	-
Animals	-	1	3	-	1	3
Dinosaurs	-	1	1	-	-	-
Nutrition	-	-	2	1	-	-
Weather	1	-	-	-	-	1
Total	12	4	16	4	15	12
Per Cent	24.0	5.9	30.2	5.5	29.4	17.1
Number of Pupils	50	68	53	73	51	70

*Topics are listed in language as expressed by the students.

differences between the groups were statistically significant ($p \leq .01$), and for the third level, the p was $\leq .10$, which may indicate a trend, but is not significant statistically. For the first and second grade sequences the comparisons, in per cents, were as follows: pioneers, 24.0% and 30.0% versus 5.9% and 5.5% for the later group. In the third grade sequence, Level III, the differences were 29.4% for the pioneers and 17.1% for the other group. The quality of the recollections of the pioneer students, reflecting the diversity and advanced calibre of the Astor Program curriculum, is especially impressive in this area. (Table XIII)

Mathematics. Again, in mathematics, the post-1977 group tended to recall the specific basic skills usually taught in the earlier grades, while the pioneer students responded by referring to the broader term "mathematics". For example, in recollecting their prekindergarten/kindergarten experiences, all the pioneer group responses cited mathematics, while 36.4% of the later group's responses cited such specifics as counting, numbers, addition, subtraction. The difference is statistically significant, with $p \leq .05$. Also significant was the difference in responses for Level II, with $p \leq .01$. For Level III, the responses did not differ significantly between the groups. (Table XIV)

TABLE XIV

MATHEMATICS: RECOLLECTIONS OF SPECIAL TOPICS STUDIED - Frequency of Mention

Topic*	Level I		Level II		Level III	
	Pioneer f	Other f	Pioneer f	Other f	Pioneer f	Other f
Mathematics	8	4	13	10	12	12
Advanced Mathematics	-	-	1	1	-	-
Fractions	-	-	-	-	-	2
Probability	-	-	1	-	-	-
Counting	-	1	-	-	-	-
Numbers	-	2	-	-	-	-
Addition	-	2	-	1	1	1
Subtraction	-	2	-	-	-	1
Multiplication	-	-	-	2	3	5
Division	-	-	-	-	2	2
Arithmetic	-	-	1	4	-	-
Total	8	11	16	18	18	23
Per Cent	16.0	16.2	30.2	24.7	35.3	32.9
Number of Pupils	50	68	53	73	51	70
Total - Arithmetic Processes Only	0	7	1	7	6	11
Per Cent	0.0	10.3	1.9	9.6	11.8	15.7

*Topics are listed in language as expressed by the students.

Art. Students mentioned studying architecture, coloring, finger painting, sketching, photography and drawing as art experiences they had had in the primary grades. For the first two grade sequences, the pioneer students mentioned these art experiences more frequently than the later group, but the differences were not statistically significant. For Level I, where the difference in responses was greatest, 14.0% vs. 5.9%, the p was $\leq$ .10.

Music. Pioneer students told us in questionnaires and in interviews that they had enjoyed their music experiences, especially in Levels I and II. The results of this analysis show differences favoring the pioneer students for all three grade sequences, but only the second(Level II) yielded a statistically significant difference, $p \leq .05$. The percentages were 12.0%, 15.1% and 9.8% for the pioneer students as compared with 5.9%, 4.1% and 5.7% for the later students.

Other Areas. Besides the major curriculum areas cited above, students listed many more general topics which they recalled studying during the early grades. These were: drama, arts and crafts, cooking, career study, games and gymnastics, hobbies. They also mentioned discussions of values, such as helping others, being kind, friendship, getting along with others, keeping out of trouble, and family activities. There were no notable or significant differences between the pioneer and other students for Levels I and II. For Level III, there was a significant difference in the number of topics recalled favoring the pioneer group, 17.6% vs. 5.7%, with $p \leq .01$.

Summary. The foregoing analysis of pupils' recollections of topics they studied during the prekindergarten-grade 3 period revealed these interesting points about those who had been in Astor Program classes from prekindergarten through grade three (the "pioneers"):

1. They recall significantly more topics and areas studied than those who joined them after the third grade.

2. Subjects recalled more frequently by the pioneer group than the later group include science, reading and literature, and mathematics.

3. The quality as well as quantity of recollections by the pioneer students was significantly more advanced than for the later group.

PUPIL REACTIONS TO SCHOOL

In a separate questionnaire, the students were asked to "write four or five sentences about how you felt about school in the early grades." The following are samples of their reactions.

> *I think that in the early grades I enjoyed school. I was part of the first class of the Astor Program and this gave me and my close friends a sort of status. This status made school ever more enjoyable than it was to begin with. I also liked the fact that we always had two teachers to ask questions, ... On the whole I think my early years in the Astor Program were quite worthwhile, and three of the best years of school I've had.*

> *In the Astor Program, I was happy with my classmates, teachers, and work. It was especially enjoyable because of the wonderful children there. The work was interesting, which was very important so the students wouldn't get bored. If I had a choice, I would go back to the Astor Program.*

> *I especially enjoyed learning during this period. The schoolwork constantly challenged me, and I generally did very well (except in math). The only thing I truly disliked about school was my lack of popularity and my inability to get along with my classmates. However, as a learning experience, I enjoyed it.*

In Level II, I remember we did creative writing a lot, where the teacher would give us a starting sentence and we would develop it, and I enjoyed this a lot. In Level I, I remember how nice all the teachers were to us when we were there, and I remember some of the class discussions that we used to have. From Level I, I also remember how much we all enjoyed it when the teacher played the piano for our class.

I enjoyed it very much..... . I was enthusiastic, especially in Level III, because I liked my teachers very much. The subjects were fun enough to be enjoyable, but there were also serious subjects where fun and foolery were out.

I think that the Astor Program gave me a good starting experience in school. I have to say that Level II was my best year ever in school. I learned the most I ever have in the Astor Program.

I liked school a lot. In kindergarten, I had two very good teachers and school was very enjoyable. In first grade the teachers were good, and we had several animals, such as two rabbits. (I love bunny rabbits.) In second grade, I had one of the teachers I had had in kindergarten. I liked her a lot. We did nice things that year. I enjoyed school a great deal in those years.

It is interesting to note that other children who had been added to the Astor Program classes after grade three recalled their kindergarten/primary years somewhat differently. Although most made favorable comments, they also added negative statements which were not found among the remarks made by the pioneer Astor Program children. For example:

I liked it but it was babyish. I liked learning and free time. My teachers were nice.

I enjoyed school and being with my friends, but, until I moved to New York in the third grade, I didn't learn much. I learned the basics like reading, adding, and subtracting, but nothing much.

I did not have any strong feelings about my school in such early grades because nothing really happened except for taking naps and drawing and eating, which was not something to feel good or bad about. In second grade, school was not tefrific because I hated our teacher and she was never there. She was always sick or something.

I thought kindergarten and grades one and two were fun, but it was almost all fun and games. Because of this I did not learn as much as I could have.

In kindergarten we learned a lot, but it was very crowded. It was the same in first and second grade. The teacher also couldn't get to us fast enough, so I couldn't get as much done as I should have.

Well, I didn't mind too much. It was fun, but it was a little easy and the kids weren't very grown up. But then I came to this school in Level III. I was scared because I was aware this was a special program. I didn't know how to act or anything.

In kindergarten, I was smarter than the others, so I had harder work. I didn't mind that then. In first grade, mu teacher was always yelling. She was mean. In second grade, my teacher was very nice.

Strangely, or perhaps happily, there are no comments like these negative reactions among the responses of children who had been in the Astor Program during the early school years. Children who were in the beginning grades of the Astor Program cite the interest and challenge of the work and specific learning experiences. For example:

In kindergarten, I loved the French. I wish it was continued.

I liked studying trees . . . I also liked writing journals about what we did on the weekend.

Our math teacher made me love math.

We had so many classroom pets, it was like a zoo.

In Level I, I remember learning Roman numerals.

In second grade, our teacher would read to us in the Reading Space, a little place behind the bookcase. Those were the good days.

It was a wonderful program.

I learned a lot and, at the same time, I had fun.

It was an experience to remember. . . I'm grateful for it.

In kindergarten, my class had spectacular experiences.

SUMMARY

After reading the children's recollections of the program and analyzing the more objective reaction questionnaires, the conclusion is inevitable. The children enjoyed their early experiences in the Astor Program classes and, in the words of two of them: "It was an experience to remember." "It was a wonderful program." That had been our goal, to have the students enjoy the experience; and it is gratifying to find that, even after several years, the students remain enthusiastic about their experience.

SECTION VI

FACTORS OPERATING IN THE SUCCESS OF THE ASTOR PROGRAM

After reviewing all the current data on the Astor Program and the results presented in this and earlier studies, it seems appropriate to conclude that there were many factors that contributed to the success and continuing expansion of the practices and philosophy advocated by the program. These factors correspond to major precepts for planning and implementing successful educational innovations (6).

TIMELINESS

Essential was the timeliness of the innovation in terms of trends in the field of developmental psychology, which stress the importance of the early years, against a background of the national resurgence of interest in the education of the gifted following the Marland Report to Congress (9).

RESPONSE TO NEEDS EXPRESSED BY PARENTS

The program had been initiated in response to parent pleas that something be done for their young gifted children. The director's records of requests made over a long period had established a key argument favoring such action. Certainly, the bulging files of applicant forms (over 2,000) which followed the announcement of the program are ample testimony to the urgency of the need. The fact is that, in a potential population of approximately 80,000 at the prekindergarten/kindergarten levels, in both public and private schools, there might be as many as 4,000 (5%) youngsters who could qualify for a program for the gifted.

INVOLVEMENT OF PARENTS

As has been reported in the section on parent reactions in this and earlier studies, parents are very much concerned about the education and nurturing their children receive in school. Parents of gifted children are observant, note failures, and are very appreciative of successful practices. Their involvement with the Astor Program from the very beginning when they appeared for the first interview with their children through participation in school activities, attendance at orientation sessions, and continuous dialogue with teachers and administrators in the program made them feel welcome, appreciated, and included in this important phase of their children's lives.

SPECIFIC GOALS OF THE PROGRAM

The goals of the program were stated from the very beginning:

a. To be a change agent in educational philosophy with respect to the early education of gifted children in public schools
b. To make the program a permanent part of the school system, with all planning geared to this goal
c. To demonstrate that such children could be identified successfully from an early age
d. To develop a curriculum that was matched to the students' capacities
e. To demonstrate how much more such students could learn in a supportive environment geared specifically to their intellectual level of performance

As this and earlier reports have demonstrated, each of the above goals was achieved. The fact that these and even more specific goals were clearly stated, in writing, from the very beginning gave direction to the program.

SHARING THE UNDERLYING PHILOSOPHY OF THE PROGRAM

The Astor Program's guiding beliefs were summarized in a list of statements that appeared in descriptive brochures and were known to all the parents as well as teachers and cooperating administrators. These were, in detail, stated as follows:

The Astor Program believes that gifted children need:

- to be in an understanding, accepting school environment with teachers and administrators sympathetic to their special needs.
- to enjoy the companionship of peers of comparable abilities.
- to discover early the joys of learning.
- to be allowed to develop socially and emotionally at a pace consistent with their ages.
- to acquire a sense of social and civic responsibility early in their school experiences.
- to be exposed to a differentiated and enriched curriculum suited to their ability levels and their special needs.
- to learn to think precisely and logically.
- to develop basic skills needed in reading, mathematics, science, social living and other curriculum areas as early as possible and to the greatest extent possible.
- to learn to accept responsibility for their own behavior and for the consequences of their acts.
- to be allowed to enjoy their childhood while realizing their intellectual potential.

PROVIDING EVIDENCE OF SUCCESS

Another factor which helped to establish the viability of the program was the planning from its inception to provide objective evidence that the program was effective in terms acceptable to educators and administrators. A research design, which included data on pupil achievement and attitudes, parent, teacher, and administrative reactions and evaluations, and careful records for each pupil, all made possible the presentation of convincing data on the efficacy of the program. The presentation of these data helped to answer the question frequently asked about innovations: "Did it make a difference?" (2, Chapter 7)

PUBLIC RELATIONS

The strategic uses of public relations through the press, television, radio, and within the school system were also contributing factors. The cooperation of foreign language newspapers and radio broadcasts helped us to reach populations that normally would not have known about the program. Cooperation with writers for newspapers and magazines who became interested in our work helped to provide a favorable climate of public opinion. Also important was the practice of a certain amount of restraint during the early stages of the program when premature publicity, without adequate evidence of success, could have done more damage than good. Certainly, the citywide conferences sponsored by the program helped to inform not only members of the New York City system, but many others who came from the metropolitan area. These were considered occasions for sharing what was being done and the many materials developed in our work. They also helped to develop a spirit of cooperation within the school system. Since children were a significant presence at all these meetings, participants never lost sight of the specific object of our attentions.

PUPIL IDENTIFICATION

The employment of sound identification techniques, which have withstood the test of time and disagreements in the field, also contributed to the continuation of the program. Contrary to expectations, early identification of children did not break down with the passage of time. As was presented in the first report on the study, there was a close parallel between the initial testing of students and testings administered two and three and one-half years later (2). Again, the use of multiple criteria and strategies for identification, which were clearly detailed in advance and implemented by a well trained staff, helped to prevent some of the pitfalls that can occur when such precautions are not taken. These techniques were discussed at length in that publication.

FLEXIBILITY

Flexibility of management procedures made adaptations possible without detracting from the quality of the program. When a program is being adopted by school districts which have almost complete autonomy, are composed of a great variety of pupil populations and which vary in number of pupils, schools, ethnic and socio-economic composition, local philosophy, and all the other variables operative in any community, it is important to build into the plans the capacity for change and adaptation. As has been reported here, especially in the section on principals and teachers, each community and school made the changes necessitated by local control and the limitations of school budgets, yet were able to maintain the spirit and essence of the Astor Program.

CURRICULUM DESIGN

Probably the most significant aspect of the Astor Program was its success in developing a unique and effective curriculum eclectic in nature, based on a sound philosophy of education, and meeting the needs of the children as

viewed by their parents as well as others. It had been the goal to draw on what was already known in educational psychology, learning theory, and research evidence concerning gifted children, as well as on the practical experience of many years in a school system that had been a national leader in education of the gifted, and to combine these in a manner that would be most relevant and practicable in the classroom. The practice of continuous self-evaluation, shared by the teachers and director, helped to improve techniques and arrive at practices that apparently were successful, if we may judge by the research evidence on the success of the program in both affective and cognitive areas and its expansion through the educational community.

SELECTION PROCEDURES FOR TEACHERS

As was made evident in the section on teachers in this report, the selection procedures for teachers were also a significant factor in the ultimate success of the program. The criteria established for their selection proved to be successful guides (2). The teachers formed a well disciplined, cooperative corps, whose interest in advancing the program and whose conviction about its merits assured continuity.

IN-SERVICE TRAINING OF TEACHERS

Continuous in-service training of teachers is an essential aspect of the success of innovations in education. Astor Program teachers were given an extensive background in the nature and needs of the gifted and methods of teaching them at a time when very few had received such training. At such sessions, they were able to exchange ideas, evaluate their procedures, explore new ideas and techniques. The sessions helped to develop an esprit de corps that fostered cooperation and teamwork. As they have reported here, they found this experience invaluable to their professional growth.

PLANNING FOR CONTINUITY IN EDUCATION OF THE PUPILS

Planning for continuity of the program was built into the procedures of selecting sites where the Astor Program was introduced. Commitment on the part of the administration to the cause of the gifted was an essential ingredient. Provision of the classes for the gifted at the upper levels (known as the IGC program) as practiced by the city school system was also considered. A promise on the part of the school and district that the students who came from other areas and were not part of the usual neighborhood school population would be permitted to continue in the school and district, if and when funding ended, was important in our securing the continuity of education for the children in an Astor Program sequence. Encouragement of schools in planning ahead and coordinating their activities with the junior high schools into which their pupils feed was another point. As we have found from the reports by principals, every effort is being made to articulate the elementary school program with the junior high schools to ease the transition of pupils.

INVOLVEMENT OF SIGNIFICANT PERSONS AT ALL LEVELS

No program can succeed or last for very long without the cooperation and commitment of the administrative staff. Involvement of school superintendents, school principals, supervisory personnel, and other significant persons in the program helped to establish a supporting structure for the continuity of the program. Communication with these administrators, their participation in conferences and in significant decisions, a careful respect and regard for their roles and responsibilities, all helped to involve them in the work and win their continuing support.

ROLE OF THE DIRECTOR

The director of an innovative program must assume the responsibility for advancing the work of the program by sharing the experience with as many groups and schools as possible. The conduct of teacher-training sessions even after the personal responsibility for the program had passed to local schools helped to achieve some of the continuity of practices in the classroom. Conference presentations, writings, follow-up of pupils, teaching a course at the graduate level, contacts with schools and teachers, all helped to maintain a continuing dialogue with the educational community. A follow-up study such as this has served as reassurance to the participants that they are part of a worthwhile and effective program. This produces a chain reaction of public opinion that creates a demand for furthering the principles and practices advocated.

THE FUTURE

It seems apparent from all that has transpired since the planning for the Astor Program was initiatedin 1973, that it has become a major influence in education of the gifted locally, nationally, and internationally. Aspects of the program, the planning, organization, identification procedures, teacher-training patterns, and its truly differentiated curriculum have each been subjects of interest and served as guides or models for others to follow. The ideas and concepts the program has generated are now part of the accepted "givens" of early childhood education of the gifted. As an added bonus, there is growing evidence that the concepts are gradually permeating classes for other children, as well, which is consistent with the usual beneficial impact of programs for the gifted on school systems in general.

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APPENDIX

Questionnaire for Principals

ASTOR PROGRAM FOLLOW-UP SURVEY

Principal _____ Date _____

School _____ District _____ Telephone _____

Address _____

_____ Zip code _____

Please answer these questions about the Astor Program as completely as you can. Your comments will be most welcome.

1. How many classes known as Astor Program or based on that program are there in your school.

Grade	No. of Pupils	Grade	No. of Pupils
Pre-K	_____	3	_____
K	_____	4	_____
1	_____	5	_____
2	_____	6	_____

2. Are the classes called Astor Program classes? Yes _____ No _____
How are they identified? _____
_____

3. At what age are children admitted to the prekindergarten, if any?
_____
To kindergarten? _____

4. What is the length of the school day for: Prekindergarten? _____
Kindergarten? _____

5. Do you plan to continue these classes next year? Yes ____ No _____

6. How are children selected for the program? Please name all tests used.
_____
_____
_____
_____
_____
_____

7. Do you have any in-service training for the teachers? Yes ___ No ___
Who does the training? How often? _____
_____
_____
_____
_____

8. What plans are being made for articulation with the junior high schools?
_____
_____
_____
_____
_____
_____

9. What has been the impact of the program on other teachers in the school?

10. Has there been any carryover of Astor Program practices to other classes? Please explain.

11. How does the community respond to the presence of these classes?

12. Have Astor Program children received any special awards or have they attained any unusual achievements? If yes, please attach a list of these with the children's names.

13. Please jot down some notes on your own reactions to the presence of the Astor Program classes in your school. Please add any additional comments or observations you may have on the reasons for the continuing success of the program.

(Please continue on reverse, if needed)

Thank you for taking the time to answer these questions. Please return in the enclosed stamped, self-addressed envelope to:

Dr. Virginia Z. Ehrlich
Astor Program-Gifted Child Studies
490 Hudson Street
New York, N.Y. 10014

Appendix A-2

ASTOR PROGRAM-GIFTED CHILD STUDIES
490 HUDSON STREET
NEW YORK, NEW YORK 10014

Astor Program Teacher Questionnaire

NAME: _____ Telephone: _____ (area number)

HOME ADDRESS: _____

_____ (zip)

Dear Teacher:

I am currently doing a follow-up study on the early years of the Astor Program, including a review of the program's impact on the children, teachers, schools, and parents. Please take a few minutes to respond to this questionnaire and feel free to add any notes or comments you think will be helpful. Although I do not wish to impose excessively on your time, I will welcome all your comments.

Virginia Z. Ehrlich

I. ASSIGNMENTS: Several of you transferred from one school to another and may even have left the city or teaching. Please show the dates and reasons for these changes whenever possible.

School Year	School	Location	Grade	Gifted (Not AP)	AP Sequence
2/74-6/74					
9/74-6/75					
9/75-6/76					
9/76-6/77					
9/77-6/78					
9/78-6/79					
9/79-6/80					
9/80-6/81					
9/81-6/82					
9/82-					

Changes: (Please give reasons and dates) _____

II. EDUCATION: What courses on education of the gifted have you taken since your first involvement with the Astor Program, exclusive of training programs with the director?

Course	Location	Dates	Instructor

Are you or have you been involved in a degree program for the gifted?

Yes ____ No ____ Degree? _____ When granted? _____

University? _____

III. AWARDS: Have you received any commendations, awards, or other recognition for your work with the gifted since 1974? Please give details. Yes ____ No ____

_____

_____

_____

_____

Please continue ⟶

IV. WRITINGS, PUBLICATIONS: Have you published any materials on the gifted since 1974? Yes ____ No ____

If yes, please give the title and periodical, etc., where it appeared.

_____
_____
_____
_____

V. SHARING: Some of our teachers have given in-service courses, supervised classes, or in some other way have shared their training and experiences with others. If you have had such an opportunity, please tell about it. Give course titles, location, duration, dates or position titles and range of responsibility, etc.

_____
_____
_____
_____
_____

VI. IMPACT OF ASTOR PROGRAM TRAINING, 1974-1978:

1. Do you continue to use the basic methodology of the Astor Program philosophy, insofar as possible? Yes _____ No _____

2. Have you found applications of the Astor Program methodology to other classes? Yes _____ No _____
What classes were these? _____
_____

3. State briefly how the Astor Program experience has affected your teaching patterns.
_____
_____
_____
_____
_____

4. If you are no longer teaching, has there been a carryover into your present work? Please explain briefly.
_____
_____
_____

5. If you had to cite only one aspect of the Astor Program as it existed up to 1977 (June), which would you consider the most significant in relation to your <u>personal</u> experience?
_____
_____
_____
_____

VII. PROBLEMS: As we all know, there were problems with pupils, parents, teachers (AP and other), administration. If you encountered any of these that were unusual, <u>that were clearly related to the nature and structure of the Astor Program</u>, please state it briefly and explain how it was or could have been resolved or prevented. If there were none, please say so.
_____
_____
_____
_____

VIII. STUDENTS: Have you kept in touch with any of the pupils? Have any written to you? Please list their names and present addresses if they have moved and tell briefly about any special accomplishments or news you can share. Continue on reverse of page if necessary.
_____
_____

Please continue →

ASTOR PROGRAM-GIFTED CHILD STUDIES

IX. REACTIONS TO ASPECTS OF THE ASTOR PROGRAM: Listed below are various aspects of the Astor Program where innovations were introduced. Next to each item, place a check in the appropriate column. If you think that the practices we developed should be continued, please place a check next to the item under "Continue". If you think the procedures should be changed, put a check in the "Change" column and add a brief note about how you think the change should be made.

	Continue	Change	Comment
1. The program as a whole			
2. Number of regular teachers in the classroom			
3. Added use of specialist teachers			
4. Aid of paraprofessionals			
5. Aid of student teachers			
6. Aid of parents with special skills			
7. Aid of parents in routine tasks			
8. Teacher training sessions in central location			
9. Citywide Conferences for sharing with public			
10. Relations with centrally located supervisor			
11. Methods of teaching reading			
12. Methods of teaching basic skills			
13. Methods of teaching thinking skills			
14. Use of special interest topics			
15. Stress on affective education and character development			
16. Classroom discussions			
17. Four-hour day for Level I			
18. Five-hour day for Level I			
19. Early admission in Level I			
20. Class size: Level I (one teacher)			
21. Class size: Level II (one teacher)			
22. Class size: Upper levels (one teacher)			
23. Availability of classroom library , references			
24. Availability of extra supplies, teaching aids			

Please return in the enclosed stamped, self-addressed envelope to:

Dr. Virginia Z. Ehrlich
Astor Program-Gifted Child Studies
490 Hudson Street
New York, New York 10014

A PROMPT RESPONSE WILL BE GREATLY APPRECIATED. Please return to address given here by March 15, 1983.* * * * * * * * * * * * * *

Many, many thanks for your cooperation in this important study.

Appendix B-3

TEACHERS COLLEGE, COLUMBIA UNIVERSITY
Astor Program - Gifted Child Studies
Dr. Virginia Z. Ehrlich, Director

Parent Questionnaire 1981

PUPIL'S NAME _____ Boy____ Girl ____ DATE _____

ADDRESS _____ TELEPHONE (area) Number

_____ ZIP _____

PRESENT SCHOOL _____ DISTRICT _____ Grade or Level ____

SCHOOL ADDRESS _____ Since (date) _____
(If it is not a New York City public school)
If this is a new school, please tell us why you chose this one. _____

_____

1. Which school will your child attend next year? _____

2. Are you satisfied with your child's present schooling? Yes ____ No ____

Comments: _____

_____

3. Compared to the Astor Program up to June, 1977 or up to the date your child was transferred, how do you think your child's educational needs are going met now?

____ Much Better ____ Not As Well

____ Better ____ Not at All

____ About the Same

4. Please list some long-lasting benefits your child experienced in the Astor Program (through June, 1977).

_____

_____

_____

_____

5. Check each item that best describes your child's reaction to his/her PRESENT school situation, i.e., since June, 1977 or period he/she left the Astor Program.

____ Happy	____ Unhappy
____ Interested	____ Bored
____ Eager to learn	____ Frustrated
____ Finds work challenging	____ Finds work too easy
____ Likes going to school	____ Dislikes going to school
____ Has many friends	____ Has very few friends
____ Likes teacher(s)	____ Dislikes teacher (s)

6. Please list any sources of discontent that have affected your child as a result of being in the Astor Program through June, 1977 only.)

_____

_____

_____

_____

Appendix C-1

7. Please check(✓) any of the following terms that best describe the class environment of your child under: (Check both columns)

Current Class(es) (Since Sept. 1977-Astor Program or elsewhere)		Astor Program (Up to June 1977)
_____	Strustured	_____
_____	Undisciplined	_____
_____	Too much homework	_____
_____	Not enough homework	_____
_____	Noisy	_____
_____	Happy, cheerful	_____
_____	Too strict	_____
_____	Attractive	_____
_____	Children busy	_____
_____	Understanding teacher	_____
_____	Interesting activities	_____
_____	Well planned	_____

8 Has your child developed any special interest or demonstrated any special talent as a result of being in the Astor Program? Yes _____ No _____
Please tell us about it.

_____

_____

_____

9. Has your child expressed an interest in any particular line of work?
Yes _____ No _____ If yes, what is it? _____

_____

When did he/she first show an interest in this work? _____

_____

Is this interest related to school experiences?

_____ In the Astor Program _____ In other classes

_____ Elsewhere, or don't know

10. We would like to hear from your and would appreciate any additional comments you may have with respect to the Astor Program. Please continue your answer on the back of this sheet, if necessary.

_____

_____

_____

_____

PLEASE RETURN PROMPTLY * * * * * * * THANK YOU FOR YOUR COOPERATION.

Appendix C-2

STUDENT QUESTIONNAIRE

THE ASTOR PROGRAM - GIFTED CHILD STUDIES
Teachers College, Columbia University

NAME _____ _____ _____ CLASS _____ SCHOOL _____

DATE _____ _____ __

PART I: Please answer the following questions as best you can.

1. When did you start in this school? Check one.

___ KINDERGARTEN

___ Grade 1 ___ Grade 4

___ Grade 2 ___ Grade 5

___ Grade 3 ___ Grade 6

2. Have you ever been in a special program? Yes _____ No _____

If yes, what is its name? _____ _____ _____ _____

3. Do you remember the names of your teachers in the first grades of school? If you do, write their names next to the grade.

Kindergarten (Level I) _____ _____ _____ _____

_____

Grade 1 (Levels I, II)_____ _____ _____ _____

_____ _____ _____ _____

Grade 2 (Levels II,III) _____ _____ _____ _____

_____ _____ _____ _____

4. Write four or five sentences about how you felt about school in the early grades (kindergarten, grades 1 and 2).

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

_____ _____ _____ _____ _____ _____

PART II: HOW I FELT ABOUT THINGS IN KINDERGARTEN (Level I).

Topic: HOW I FELT ABOUT SCHOOL

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
QUIET	/____/____/____/____/____/____/____/	NOISY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FRIENDLY	/____/____/____/____/____/____/____/	LONELY
LOVE	/____/____/____/____/____/____/____/	HATE
NOT AFRAID	/____/____/____/____/____/____/____/	AFRAID

Topic: HOW I FELT ABOUT READING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HANDWRITING

EASY	/____/____/____/____/____/____/____/	HARD
LOVE	/____/____/____/____/____/____/____/	HATE
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
GOOD	/____/____/____/____/____/____/____/	BAD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT

NAME: _____ _____ _____ CLASS _____ SCHOOL _____

Appendix D-2

Topic: HOW I FELT ABOUT MATHEMATICS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT LEARNING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS DISCUSSIONS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
LONG	/____/____/____/____/____/____/____/	SHORT
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HOMEWORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
SHORT	/____/____/____/____/____/____/____/	LONG
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS WORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FAIR	/____/____/____/____/____/____/____/	UNFAIR
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY CLASSMATES

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
QUIET	/____/____/____/____/____/____/____/	NOISY
FRIENDLY	/____/____/____/____/____/____/____/	UNFRIENDLY
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY TEACHER (First teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID

Topic: HOW I FELT ABOUT MY TEACHER (Second teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID

PART III: HOW I FELT ABOUT THINGS IN GRADE ONE. (Levels I, II)

Topic: HOW I FELT ABOUT SCHOOL

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
QUIET	/____/____/____/____/____/____/____/	NOISY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FRIENDLY	/____/____/____/____/____/____/____/	LONELY
LOVE	/____/____/____/____/____/____/____/	HATE
NOT AFRAID	/____/____/____/____/____/____/____/	AFRAID

Topic: HOW I FELT ABOUT READING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HANDWRITING

EASY	/____/____/____/____/____/____/____/	HARD
LOVE	/____/____/____/____/____/____/____/	HATE
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
GOOD	/____/____/____/____/____/____/____/	BAD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT

NAME: _____ _____ _____ CLASS _____ SCHOOL _____

Appendix D-5

Topic: HOW I FELT ABOUT MATHEMATICS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT LEARNING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS DISCUSSIONS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
LONG	/____/____/____/____/____/____/____/	SHORT
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HOMEWORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
SHORT	/____/____/____/____/____/____/____/	LONG
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS WORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	EASY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FAIR	/____/____/____/____/____/____/____/	UNFAIR
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY CLASSMATES

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
QUIET	/____/____/____/____/____/____/____/	NOISY
FRIENDLY	/____/____/____/____/____/____/____/	UNFRIENDLY
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY TEACHER (First teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID

Topic: HOW I FELT ABOUT MY TEACHER (Second teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID

PART IV: HOW I FELT ABOUT THINGS IN GRADE TWO. (Levels II, III)

Topic: HOW I FELT ABOUT SCHOOL

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
QUIET	/____/____/____/____/____/____/____/	NOISY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FRIENDLY	/____/____/____/____/____/____/____/	LONELY
LOVE	/____/____/____/____/____/____/____/	HATE
NOT AFRAID	/____/____/____/____/____/____/____/	AFRAID

Topic: HOW I FELT ABOUT READING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HANDWRITING

EASY	/____/____/____/____/____/____/____/	HARD
LOVE	/____/____/____/____/____/____/____/	HATE
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
GOOD	/____/____/____/____/____/____/____/	BAD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT

NAME: _____ _____ _____ CLASS _____ SCHOOL _____

Topic: HOW I FELT ABOUT MATHEMATICS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT LEARNING

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS DISCUSSIONS

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
LONG	/____/____/____/____/____/____/____/	SHORT
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT HOMEWORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
SHORT	/____/____/____/____/____/____/____/	LONG
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT CLASS WORK

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
HARD	/____/____/____/____/____/____/____/	EASY
IMPORTANT	/____/____/____/____/____/____/____/	NOT IMPORTANT
FAIR	/____/____/____/____/____/____/____/	UNFAIR
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY CLASSMATES

GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
QUIET	/____/____/____/____/____/____/____/	NOISY
FRIENDLY	/____/____/____/____/____/____/____/	UNFRIENDLY
LOVE	/____/____/____/____/____/____/____/	HATE

Topic: HOW I FELT ABOUT MY TEACHER (First teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID

Topic: HOW I FELT ABOUT MY TEACHER (Second teacher, in classes with two teachers)

LOVE	/____/____/____/____/____/____/____/	HATE
GOOD	/____/____/____/____/____/____/____/	BAD
INTERESTING	/____/____/____/____/____/____/____/	BORING
KIND	/____/____/____/____/____/____/____/	MEAN
WONDERFUL	/____/____/____/____/____/____/____/	AWFUL
EASY	/____/____/____/____/____/____/____/	HARD
FAIR	/____/____/____/____/____/____/____/	UNFAIR
AFRAID	/____/____/____/____/____/____/____/	NOT AFRAID